Exhibit 8

Page 1

1   UNITED STATES DISTRICT COURT

     FOR THE WESTERN DISTRICT OF WASHINGTON

2   AT SEATTLE

     --x

3   MICROSOFT CORPORATION,

4   Plaintiff,

5   -against-

6   MOTOROLA, INC., et al.,

7   Defendants.

     --x

8   MOTOROLA MOBILITY, INC., et al.,

9   Plaintiffs,

10   Case No.

          -against-   1:10-1823-JLR

11

     MICROSOFT CORPORATION,

12

                     Defendant.

13   --x

14   August 28, 2012

15   8:41 a.m.

16

           C O N F I D E N T I A L

17

        Videotaped deposition of RAMAMIRTHAM

18   SUKUMAR, held at the offices of Sidley

19   Austin LLP, 757 Seventh Avenue, New York,

20   New York, before Gail F. Schorr, a

21   Certified Shorthand Reporter, Certified

22   Realtime Reporter and Notary Public

23   within and for the State of New York.

24

25   (2005-445668)

CONFIDENTIAL
RAMAMIRTHAM SUKUMAR - 8/28/2012

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 1   A P P E A R A N C E S:
 2   ROPES & GRAY LLP
       Attorneys for Motorola Mobility, Inc.,
 3   Motorola Solutions and the Witness
         1211 Avenue of the Americas
 4       New York, New York 10036-8704
 5   BY:  KHUE V. HOANG  ESQ.
         (khue.hoang@ropesgray.com)
 6
 7   SIDLEY AUSTIN LLP
       Attorneys for Microsoft Corporation
 8       555 California Street
         San Francisco, CA 94104
 9
     BY:   M. PATRICIA THAYER, ESQ.
10         (pthayer@sidley.com)
11
12   ALSO PRESENT:
13   TIMOTHY H. SAVAGE, Ph.D.
       Finance Scholars Group
14
     ROBERT GIBBS, Videographer,
15   Merrill Legal Solutions
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 1         E X H I B I T S
 2    DESCRIPTION          PAGE    LINE
 3   (PX Exhibit 338 for        8     9
 4   identification, expert
 5   report of Dr. R. Sukumar.)
 6   (PX Exhibit 339 for       33     13
 7   identification, Bates
 8   stamped MOTM_WASH1823_
 9   0603556.)
10   (PX Exhibit 340 for       45     13
11   identification, Bates
12   stamped MOTM_WASH1823_
13   0603557 through 3586.)
14   (PX Exhibit 341 for       67     3
15   identification, letter dated
16   August 3, 2012, to Ms.
17   Thayer from Mr. Schoenhard.)
18   (PX Exhibit 342 for       74     7
19   identification, letter dated
20   August 7, 2012, to Ms.
21   Thayer from Mr. Schoenhard.)
22   (PX Exhibit 343 for       81     21
23   identification, letter dated
24   August 21, 2012, to Ms.
25   Thayer from Mr. Schoenhard.)
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 1   (PX Exhibit 344 for       83     2
 2   identification, letter dated
 3   August 24, 2012, to Ms.
 4   Thayer from Mr. Schoenhard.)
 5   (PX Exhibit 345 for       87     25
 6   identification, errata to
 7   July 24th expert report of
 8   Dr. R. Sukumar.)
 9   (PX Exhibit 346 for      102     22
10   identification, Bates
11   stamped MOTM-WASH1823_
12   0603538.)
13   (PX Exhibit 347 for      102     25
14   identification, Bates
15   stamped MOTM-WASH1823_
16   0603547.)
17   (PX Exhibit 348 for      107     14
18   identification, Bates
19   stamped MOTM-WASH
20   1823_0606223.log.)
21   (PX Exhibit 349 for      118     22
22   identification, Bates
23   stamped MOTM_WASH1823_
24   0606212.log.)
25
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 1   (PX Exhibit 350 for      120     8
 2   identification, pages
 3   excerpted from the book
 4   entitled "Introduction to
 5   the theory of statistics.")
 6   (PX Exhibit 351 for      158     22
 7   identification, Bates
 8   stamped MOTM_WASH1823_
 9   0603683.)
10
11
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13
14   (Instruction not to answer.)   128     7
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08:40:43	1	THE VIDEOGRAPHER: Good morning,
08:40:52	2	everyone. This is the video operator
08:40:55	3	speaking, Robert Gibbs, of Merrill
08:40:57	4	Legal Solutions of San Francisco, 135
08:41:00	5	Main Street, Suite 400, San Francisco,
08:41:03	6	California 94105. Today is August
08:41:07	7	28th, 2012 and the time is 8:41 a.m.
08:41:12	8	We are at the offices of Sidley Austin
08:41:15	9	LLP, 787 Seventh Avenue, New York
08:41:19	10	City, New York, 10019, to take the
08:41:23	11	videotaped deposition of Dr.
08:41:26	12	Ramamirtham Sukumar, in the matter of
08:41:32	13	Motorola Mobility, Inc., versus
08:41:34	14	Microsoft Corporation, and
08:41:35	15	counterclaim, Microsoft versus
08:41:38	16	Motorola, in the United States
08:41:40	17	District Court, for the Western
08:41:42	18	District of Washington at Seattle,
08:41:45	19	case number C10-1823-JLR.
08:41:50	20	Will counsel please introduce
08:41:52	21	themselves for the record.
08:41:55	22	MS. THAYER: Patricia Thayer,
08:41:58	23	for plaintiff Microsoft.
08:42:00	24	MS. HOANG: Khue Hoang, Ropes &
08:42:00	25	Gray, on behalf of Motorola Mobility.

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08:42:03	1	THE VIDEOGRAPHER: Will the
08:42:04	2	court reporter, Gail Schorr of Merrill
08:42:07	3	Legal Solutions, please swear witness.
08:42:07	4	RAMAMIRTHAM SUKUMAR,
08:42:07	5	called as a witness, having been
08:42:07	6	first duly sworn by the Notary
08:42:07	7	Public (Gail F. Schorr), was
08:42:16	8	examined and testified as follows:
08:42:16	9	THE VIDEOGRAPHER: You may
08:42:17	10	proceed, counsel.
08:42:18	11	EXAMINATION BY MS. THAYER:
08:42:18	12	Q. Good morning, Dr. Sukumar. I
08:42:20	13	believe you have been deposed before; is
08:42:22	14	that right?
08:42:22	15	A. That's correct.
08:42:23	16	Q. So you are somewhat familiar
08:42:24	17	with the proceeding?
08:42:25	18	A. Yes.
08:42:27	19	Q. I would remind you that of
08:42:29	20	course this is an informal setting, and if
08:42:31	21	at any point you do need to take a break,
08:42:33	22	please indicate and we'll be happy to take a
08:42:35	23	break. I just prefer if there's a question
08:42:38	24	pending that you answer the question first
08:42:39	25	and then we can take a break. Okay?

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08:42:42	1	A. Yes, I understand.
08:42:43	2	Q. And if I ask any question that
08:42:45	3	you don't understand or isn't clear, please
08:42:47	4	indicate that to me and I'll do my best to
08:42:50	5	clarify.
08:42:50	6	A. I will do.
08:42:52	7	MS. THAYER: Let's mark as PX
08:42:55	8	338 expert report of Dr. R. Sukumar.
08:43:15	9	(PX Exhibit 338 for
08:43:15	10	identification, expert report of
08:43:15	11	Dr. R. Sukumar.)
08:43:15	12	Q. Is this the report that you've
08:43:17	13	prepared for this action?
08:43:20	14	A. Yes, I believe so.
08:43:41	15	Q. Would you look at Exhibit C,
08:43:42	16	please. Do we need to disassemble it, can
08:43:57	17	you see it all right? If we need to we can
08:44:03	18	take out that clasp and just put it back in
08:44:06	19	after you finish with your report.
08:44:35	20	A. Yes.
08:44:35	21	Q. Is that a copy of your CV?
08:44:41	22	A. That's correct.
08:44:41	23	Q. Is it up to date?
08:44:47	24	A. Yes, for the most part.
08:45:04	25	Q. When you say "for the most

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08:45:08	1	part," what's missing?
08:45:11	2	A. Well some updates on clients
08:45:13	3	that I worked with and so on might be
08:45:15	4	missing out here, some consulting
08:45:18	5	engagements that I've been involved with.
08:45:19	6	Q. Do any involve litigation
08:45:23	7	matters?
08:45:24	8	A. No. Those are here.
08:45:27	9	Q. On the first page there's a list
08:45:35	10	of deposition testimony 2012, do you see
08:45:37	11	that?
08:45:37	12	A. Yes.
08:45:38	13	Q. Did you provide any deposition
08:45:41	14	testimony at any time other than 2012?
08:45:43	15	A. No.
08:45:44	16	Q. There are three cases listed,
08:45:49	17	Apple v. Samsung, Samsung v. Apple, Apple v.
08:45:55	18	Samsung, do you see those?
08:45:56	19	A. Yes.
08:45:56	20	Q. Are those three separate cases
08:45:58	21	or are those a combined lawsuit in The
08:46:04	22	Northern District?
08:46:04	23	A. I believe they're a combined
08:46:09	24	lawsuit, yes.
08:46:16	25	Q. Did you prepare a report for the

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08:46:19	1	Nomadix case?
08:46:20	2	A. Yes.
08:46:21	3	Q. Was that report tendered to the
08:46:25	4	other side?
08:46:26	5	A. Yes.
08:46:26	6	Q. What was the general subject
08:46:28	7	matter?
08:46:28	8	A. It had to do with the usage and,
08:46:36	9	again, I don't want to get into a lot of
08:46:38	10	details here because it's confidential, but
08:46:41	11	its usage and value of certain features and
08:46:47	12	benefits.
08:46:53	13	Q. What sort of a product was
08:46:54	14	involved?
08:46:55	15	A. It's just very broadly a
08:47:00	16	technology product.
08:47:04	17	Q. You can't be any more specific
08:47:06	18	than that?
08:47:07	19	A. No. I am bound by the
08:47:09	20	confidentiality of the case that I can't
08:47:12	21	discuss anymore.
08:47:12	22	Q. So the product that was accused
08:47:15	23	of infringement, you can't identify that
08:47:17	24	under the protective order?
08:47:20	25	A. I don't have the protective

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08:47:22	1	order in front of me. I believe the
08:47:24	2	information of what the case is all about is
08:47:27	3	public information, but I prefer not to get
08:47:31	4	into the details of the case, being bound by
08:47:33	5	the protective order.
08:47:35	6	Q. What is meant by the words "case
08:47:38	7	under settlement"?
08:47:40	8	A. It is my understanding from the
08:47:44	9	counsel that the two parties are looking to
08:47:47	10	settle the case out of -- and not taking it
08:47:50	11	to trial.
08:47:50	12	Q. Which party retained you in that
08:47:57	13	case?
08:47:58	14	A. Nomadix.
08:48:01	15	Q. Did you perform a survey in that
08:48:04	16	case?
08:48:05	17	A. Yes, I did.
08:48:05	18	Q. Was the survey produced to the
08:48:09	19	other side?
08:48:10	20	A. Yes.
08:48:11	21	Q. Was the survey identified as
08:48:16	22	being confidential under the protective
08:48:18	23	order?
08:48:18	24	A. I'm not familiar with that and I
08:48:22	25	would go with the assumption that it is

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08:48:25	1	under the protective order. So I, I'm not a
08:48:29	2	legal expert to tell you exactly what it is.
08:48:31	3	I would err on the side of it being
08:48:33	4	confidential.
08:48:41	5	Q. What type of a survey did you
08:48:44	6	conduct for that case?
08:48:45	7	A. Could you repeat that question.
08:48:46	8	Q. What type of a survey did you
08:48:48	9	conduct for that case?
08:48:51	10	A. What exactly do you mean by the
08:48:53	11	type of survey?
08:48:54	12	Q. What approach did you use to
08:49:00	13	conduct a survey?
08:49:02	14	A. If what you mean is by approach
08:49:04	15	is whether it was done in person or whether
08:49:06	16	it was done through mail or over the phone,
08:49:10	17	this one was done through the internet.
08:49:14	18	Q. Was it a conjoint survey?
08:49:17	19	A. It involved conjoint analysis,
08:49:20	20	yes.
08:49:25	21	Q. Did you personally recruit the
08:49:32	22	respondents for that survey or did you have
08:49:34	23	assistance?
08:49:35	24	A. Again, I can't go into the
08:49:37	25	details of it. Again, I'm not sure how much

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08:49:39	1	I can or cannot talk about that case and how
08:49:42	2	much of it is under protective order. But
08:49:46	3	it was an online survey, I can tell you
08:49:48	4	that. The survey was completed online by
08:49:50	5	the respondents.
08:49:51	6	Q. For the Apple v. Samsung,
08:50:11	7	Samsung v. Apple matters, did you prepare
08:50:13	8	any report?
08:50:16	9	A. Yes.
08:50:16	10	Q. How many?
08:50:18	11	A. I first prepared three reports
08:50:21	12	as suggested by those three there.
08:50:23	13	Q. Which party retained you?
08:50:32	14	A. Samsung.
08:50:33	15	Q. Did you conduct any survey in
08:50:35	16	connection with those matters?
08:50:36	17	A. Yes, I did.
08:50:37	18	Q. How many?
08:50:38	19	A. There were, again, three
08:50:45	20	separate surveys.
08:50:48	21	Q. Could you describe each of them
08:50:50	22	to me in terms of the subject matter?
08:50:52	23	A. Without getting into any of the
08:50:55	24	details, because I don't know, I don't have
08:50:56	25	the documents, and while they're protected,

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08:51:01	1	I can say it was an online survey, had to do
08:51:03	2	with three different products. It involved
08:51:09	3	conjoint.
08:51:14	4	Q. What products did it -- you've
08:51:18	5	used the word "it." How many online surveys
08:51:21	6	did you conduct?
08:51:22	7	A. So there were three different
08:51:25	8	surveys.
08:51:29	9	Q. All three online?
08:51:30	10	A. Yes.
08:51:31	11	Q. What were the three products?
08:51:35	12	A. It had to do with the Apple
08:51:40	13	products iPhone, iPad, and iPod Touch, and
08:51:46	14	there were specific models and versions.
08:51:49	15	Again, I don't want to get into all the
08:51:51	16	details.
08:51:52	17	Q. Well there's been a trial in
08:51:54	18	that case, are you aware of that?
08:51:55	19	A. Yes.
08:51:56	20	Q. It was very publicly discussed
08:51:59	21	on the internet?
08:52:00	22	A. Correct.
08:52:00	23	Q. Were any of your reports entered
08:52:09	24	into evidence, to your knowledge?
08:52:11	25	A. Yes.

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08:52:11	1	Q. Which ones?
08:52:22	2	A. I did. I do know for a fact
08:52:23	3	that the survey reports were entered into
08:52:26	4	evidence and -- yes.
08:52:29	5	Q. Did you testify at trial?
08:52:30	6	A. Yes.
08:52:38	7	Q. Did the judge clear the
08:52:40	8	courtroom at the time that you were
08:52:40	9	testifying, in other words, tell everybody
08:52:42	10	that there was confidential information that
08:52:46	11	was about to be discussed and that the
08:52:48	12	public should leave the courtroom?
08:52:49	13	A. I don't believe so.
08:52:55	14	Q. Just generally, what opinions
08:52:59	15	did you provide at trial in that case?
08:53:06	16	A. I presented the results out of
08:53:07	17	my survey.
08:53:13	18	Q. All three of them?
08:53:16	19	A. Yes.
08:53:16	20	Q. Other than what's listed here in
08:53:26	21	your CV, have you provided deposition
08:53:28	22	testimony in any other case?
08:53:30	23	A. No.
08:53:30	24	Q. Are you trained as an economist?
08:53:38	25	A. No.

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08:53:39	1	Q. Are you trained as a
08:53:41	2	statistician?
08:53:42	3	A. I'm trained -- no.
08:53:44	4	Q. Do you consider yourself to be
08:53:49	5	an expert in the field of conducting and
08:53:52	6	analyzing surveys?
08:53:53	7	A. Yes.
08:53:53	8	Q. And what is the basis for your
08:53:56	9	expertise?
08:53:56	10	A. I'm trained in market research
08:54:00	11	and quantitative methodologies and I have
08:54:07	12	been doing survey research since 1995.
08:54:19	13	Q. In your CV in the middle of page
08:54:22	14	1 it says "Dr. Sukumar has served as the
08:54:24	15	market research survey expert in cases that
08:54:26	16	have dealt with patent and trademark
08:54:28	17	infringement."
08:54:29	18	Do you see that?
08:54:30	19	A. Yes.
08:54:30	20	Q. Have you served as an expert in
08:54:32	21	any case other than what's discussed on page
08:54:34	22	1 and the present action?
08:54:36	23	A. Not as an expert, no.
08:55:06	24	Q. Does Exhibit C have a complete
08:55:08	25	listing of the articles that you have

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08:55:10	1	written?
08:55:21	2	A. Those that have been published,
08:55:22	3	yes.
08:55:22	4	Q. Are there any that are pending
08:55:28	5	publication that are not listed here?
08:55:30	6	A. There are others that have been
08:55:41	7	either written or cited in popular press and
08:55:49	8	those have not been listed out here.
08:55:52	9	Q. Could you give me an example of
08:55:54	10	what you mean by popular press?
08:55:55	11	A. So recently in Forbes I was
08:56:00	12	quoted in terms of the use of data and
08:56:05	13	analytics in making decisions for large
08:56:11	14	corporations and how they make decisions.
08:56:14	15	So there are citations of that kind.
08:56:17	16	Q. Do you consider that to be a
08:56:18	17	publication of yours?
08:56:19	18	A. Well, as I said, it's not a
08:56:22	19	publication that is peer reviewed, but it
08:56:25	20	cites me, it quotes me.
08:56:27	21	Q. You mentioned that the Nomadix
08:56:56	22	case involved conjoint analysis. How many
08:57:01	23	studies have you supervised or conducted
08:57:05	24	that involved conjoint analysis?
08:57:08	25	A. In the last four years I would

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08:57:15	1	say I've done close to, I don't remember the
08:57:19	2	exact number, but I would say close to 300
08:57:22	3	studies that involved conjoint analysis.
08:57:33	4	Q. Have any of those involved the
08:57:37	5	Xbox?
08:57:40	6	A. There are a couple that involve
08:57:50	7	video gaming software that run on Xbox, that
08:58:01	8	may run on Xbox, yes.
08:58:03	9	Q. Did any of them involve the Sony
08:58:10	10	PlayStation?
08:58:12	11	A. Well since we're talking about
08:58:14	12	the broad area of video games and design of
08:58:18	13	video games, they all look at different
08:58:21	14	platforms and they use different platforms.
08:58:23	15	Q. Was the object of your research
08:58:26	16	the platforms or the video games themselves?
08:58:29	17	A. The video games, as I mentioned.
08:58:31	18	Q. Have you published any research
08:58:39	19	on conjoint methods in any journal?
08:58:45	20	A. Well, one of the papers there
08:58:47	21	which deals with the use -- with product
08:58:49	22	line design, involves conjoint methods and
08:58:53	23	looking at product line design. So the one
08:58:56	24	that is published in Management Science says
08:59:00	25	"Heuristics for product-line selection using

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08:59:02	1	conjoint analysis," that was conjoint
08:59:05	2	analysis.
08:59:06	3	Q. Do any of your publications
08:59:10	4	involve survey methodology?
08:59:11	5	A. Yes, I mean the product line,
08:59:18	6	the heuristics paper does involve the use of
08:59:21	7	survey methods.
08:59:24	8	Q. Does that article, does it
08:59:27	9	address survey methodology or does it just
08:59:30	10	simply mention it?
08:59:31	11	A. Well it uses data from survey
08:59:34	12	methodologies.
08:59:34	13	Q. When were you first contacted to
08:59:42	14	perform work in this matter?
08:59:44	15	A. You mean in this particular
08:59:48	16	case?
08:59:48	17	Q. Yes.
08:59:49	18	A. Okay. I was contacted, and I
08:59:53	19	don't know the exact, I don't remember the
08:59:55	20	exact dates here, but roughly around the end
08:59:58	21	of the third week of I would say June.
09:00:04	22	Q. Of 2012?
09:00:05	23	A. 2012, yes.
09:00:06	24	Q. Who contacted you?
09:00:08	25	A. By counsel.

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09:00:10	1	Q. And who was that?
09:00:11	2	A. Josef Schenker.
09:00:17	3	Q. And when were you specifically
09:00:19	4	retained to perform work for the case?
09:00:22	5	A. Somewhere during that same week.
09:00:26	6	Q. What were you told, or what was
09:00:35	7	described to you about the scope of your
09:00:40	8	duties for this case?
09:00:43	9	MS. HOANG: Objection. I'm
09:00:44	10	going to instruct you not to answer
09:00:46	11	that on the grounds of privilege. If
09:00:47	12	you want to rephrase and narrow that
09:00:49	13	up, we'll take it piece by piece.
09:00:51	14	Q. Were you provided by counsel any
09:00:53	15	factual background before you were retained
09:00:56	16	for this case about what it involved?
09:00:59	17	A. There was no factual background
09:01:05	18	given to me. It was verbal conversation
09:01:08	19	with counsel.
09:01:09	20	Q. It was what?
09:01:10	21	A. It was verbal counsel he --
09:01:13	22	verbal conversation with counsel, so counsel
09:01:16	23	spoke to me.
09:01:17	24	Q. Right. I'm asking you what
09:01:19	25	counsel, what facts counsel provided you

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09:01:21	1	about the case that pertained to the work
09:01:23	2	that you would be doing on the case?
09:01:25	3	A. So let me --
09:01:28	4	MS. HOANG: Let me interpose a
09:01:30	5	cautionary instruction here. If you
09:01:32	6	can recall specifically what was
09:01:34	7	communicated to you prior to your
09:01:37	8	retention on this case then you can
09:01:39	9	answer. Nothing is to be communicated
09:01:42	10	after you were retained for this case,
09:01:44	11	if you can make that distinction.
09:01:45	12	A. Okay, so nothing was
09:01:47	13	communicated to me prior to being retained
09:01:50	14	if that's what you're looking at.
09:01:54	15	Q. After you were retained, did
09:01:57	16	counsel provide you any facts that you
09:01:59	17	relied on in preparing your report?
09:02:03	18	MS. HOANG: You can answer yes
09:02:05	19	or no.
09:02:05	20	A. So I'm not very clear when you
09:02:07	21	say facts, what do you mean by facts about
09:02:09	22	the case? That's the area that I'm not
09:02:11	23	clear about. Because I was asked to do
09:02:17	24	certain things in terms of my report and the
09:02:20	25	objectives are specified and that's how I

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09:02:23	1	went about it.
09:02:23	2	So when you say facts about the
09:02:25	3	case, I'm not clear what you mean by that.
09:02:28	4	Q. Information about the products
09:02:32	5	or features that would be the subject of
09:02:38	6	your research and opinions.
09:02:42	7	MS. HOANG: Start with a yes or
09:02:43	8	no first.
09:02:44	9	A. Yes.
09:02:44	10	Q. What facts about the products or
09:02:48	11	features were provided to you by counsel?
09:02:51	12	A. The general description of the
09:02:59	13	product and the general description of the
09:03:05	14	features that needed to be looked at in the
09:03:08	15	survey.
09:03:08	16	Q. When did you commence work on
09:03:31	17	the survey?
09:03:31	18	A. Sometime towards the end of the
09:03:40	19	month of June. I don't remember the exact
09:03:42	20	date, yes, but somewhere around there.
09:03:44	21	Q. And once you commenced work on
09:03:51	22	the survey, could you describe to me what
09:03:53	23	you did?
09:03:54	24	A. Well, the first step that was
09:03:58	25	involved was to have my moderators, my field

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09:04:03	1	team conduct a set of interviews with
09:04:11	2	consumers who had purchased Xbox 360s in
09:04:17	3	order to gauge an initial understanding from
09:04:23	4	them about what were some of the features
09:04:26	5	used, the benefits that people look for in
09:04:31	6	these gaming consoles.
09:04:37	7	With that input, I designed the
09:04:42	8	survey. And that survey was then pilot
09:04:48	9	tested by my field team. The results of the
09:04:54	10	pilot tests were provided to me.
09:04:59	11	And the final survey was
09:05:03	12	launched to a set of consumers who represent
09:05:09	13	the US population. They go through the
09:05:13	14	usual screening criteria in the survey. The
09:05:16	15	data was obtained and analyzed.
09:05:18	16	Q. On what date did you first begin
09:05:21	17	to design the survey?
09:05:22	18	A. I don't recall the exact date.
09:05:27	19	It was sometime after we were engaged.
09:05:28	20	Q. Was it days or weeks after, do
09:05:32	21	you recall?
09:05:32	22	A. I don't expect it to be weeks.
09:05:35	23	It was pretty much a few days after.
09:05:37	24	Q. Do you have any drafts of the
09:05:48	25	survey?

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09:05:50	1	A. I've included the version that
09:05:53	2	was programmed and the final version. The
09:05:58	3	drafts of the survey for pilot testing were
09:06:01	4	given to my field team.
09:06:05	5	Q. Do you still have them?
09:06:06	6	A. When you say do you still have
09:06:10	7	them, I'm not carrying them with me today.
09:06:13	8	And I personally don't keep, I always
09:06:16	9	overwrite on top of my other versions, so I
09:06:20	10	don't have that.
09:06:20	11	Q. Are there any drafts of the
09:06:25	12	survey still in existence?
09:06:28	13	A. The version that was pre-tested
09:06:33	14	should be there with my field team.
09:06:46	15	Q. You mentioned your field team
09:06:52	16	conducted a set of interviews with
09:06:55	17	consumers. Who were the people in this
09:06:57	18	field team?
09:06:58	19	A. Lia Pasternack as the moderator.
09:07:01	20	She's the one who does -- in this case she's
09:07:06	21	the one who did that. She's the head of the
09:07:08	22	field team.
09:07:08	23	Q. Well did she do it, or did a
09:07:11	24	team do it, or both?
09:07:12	25	A. No, she did it. She may have

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09:07:14	1	used proctors or people responsible for the
09:07:22	2	logistics, but fundamentally she did the
09:07:26	3	moderating.
09:07:31	4	Q. So she was the only person to
09:07:33	5	interview consumers who had purchased
09:07:36	6	Xboxes; is that right?
09:07:37	7	A. That's correct.
09:07:38	8	Q. How many people did she
09:07:41	9	interview?
09:07:41	10	A. So the first set of interviews
09:07:43	11	were a total of about 30 and then the pilot
09:07:50	12	tests involved another 60 people.
09:07:51	13	Q. When you say about 30, do you
09:07:53	14	recall the number?
09:07:53	15	A. It's -- I need to look at my
09:07:56	16	report. I think it was 30.
09:07:57	17	Q. If it's in your report we'll
09:07:59	18	find it.
09:08:00	19	A. Okay.
09:08:05	20	Q. Did she do these all in one day?
09:08:07	21	A. Well, the way, I mean the way it
09:08:12	22	works is she briefs me on what was done
09:08:16	23	verbally and the way I was briefed was that
09:08:21	24	it was done in a mall and respondents were
09:08:26	25	invited, they were recruited by the

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09:08:29	1	proctors, they were brought in, there maybe
09:08:33	2	two or three at a time, and that's how she
09:08:35	3	conducted it.
09:08:37	4	I don't recall exactly whether
09:08:38	5	she did it in a day or two days. That's not
09:08:40	6	something that matters to me.
09:08:41	7	Q. Do you know when she did it?
09:08:43	8	A. It would have been right when
09:08:46	9	we, you know, few days after we were engaged
09:08:49	10	to start with the initial round of 30
09:08:51	11	interviews, and then subsequently after the
09:08:54	12	survey was designed and programmed she would
09:08:56	13	have done the pilot survey. So again, I
09:09:00	14	don't know the exact dates, but it would
09:09:02	15	have been in that, the week after we were
09:09:04	16	engaged, somewhere around there.
09:09:10	17	Q. Do you have a calendar that
09:09:11	18	would reflect any of these dates more
09:09:13	19	specifically?
09:09:15	20	A. No.
09:09:16	21	Q. If it were important for you to
09:09:21	22	determine on which day or days these
09:09:26	23	interviews were conducted, how would you go
09:09:30	24	about determining that?
09:09:30	25	A. I'm not sure that that is

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09:09:34	1	something that is important for me as far as
09:09:41	2	it doesn't change my design of the survey or
09:09:46	3	my process. What I need is information
09:09:48	4	about -- from -- that is qualitative in
09:09:50	5	nature. So the exact day or days does not
09:09:53	6	matter to me.
09:09:54	7	Q. I understand it doesn't, but if
09:09:55	8	it did, how would you go about finding out
09:09:57	9	the date this year that interviews were
09:10:00	10	conducted of these, in this mall?
09:10:09	11	A. You know, I wouldn't know. Her
09:10:11	12	team would probably have a record of it or
09:10:13	13	she would be able to, you know, the mall
09:10:17	14	that we went to, obviously it's a facility
09:10:21	15	that we utilize, they would have a record of
09:10:23	16	it. But I don't personally have any record
09:10:25	17	of that.
09:10:26	18	Q. Which mall did you go to?
09:10:27	19	A. I don't recall.
09:10:29	20	Q. I should correct that question.
09:10:33	21	Which mall did she go to?
09:10:34	22	A. I'm not aware of that. These
09:10:37	23	are, again, standard procedures that she's
09:10:40	24	trained to do and she knows, and the
09:10:45	25	selection of the mall does not impact the

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09:10:49	1	steps that were followed and the results
09:10:50	2	that came out of that.
09:10:53	3	Q. Did she rent a room at this
09:10:59	4	mall, or did she just set up near some
09:11:02	5	store?
09:11:03	6	A. So most malls, this is my
09:11:05	7	understanding, most malls would have a
09:11:08	8	facility on the mall site that does recruit
09:11:13	9	people and help, provides you with the
09:11:16	10	facility to do the necessary interviews, and
09:11:20	11	since these are qualitative in nature and
09:11:21	12	exploratory in nature, she would have
09:11:23	13	engaged one of those facilities in order to
09:11:26	14	complete that exercise.
09:11:27	15	Q. So do you know for a fact that
09:11:29	16	she rented a room rather than setting up
09:11:33	17	outside a store, or are you just telling me
09:11:36	18	generally your understanding of how it might
09:11:38	19	have gone?
09:11:38	20	A. I don't know for a fact.
09:11:39	21	Q. How many proctors did she use to
09:11:46	22	assist her in this research?
09:11:48	23	A. I don't know for a fact. It
09:11:50	24	doesn't impact my results in any way.
09:11:53	25	Q. How did she instruct them to

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09:11:57	1	find the people for her to interview?
09:11:59	2	A. The instructions that I had
09:12:02	3	given her were along the lines of the
09:12:08	4	screener that we had put together, that I
09:12:11	5	have put together for the study. So it's
09:12:14	6	part of the exhibit here where there's a set
09:12:17	7	of questions about age, gender, ethnicity.
09:12:26	8	Again, the purpose of that mall
09:12:28	9	intercept was not to, the purpose of that
09:12:32	10	was essentially to focus on the question
09:12:35	11	about Xbox 360. It had nothing to do with
09:12:41	12	having a representative sample. It's an
09:12:45	13	exploratory exercise. So but the guidelines
09:12:48	14	are very similar to, were exactly the same
09:12:50	15	as the questionnaire, the first few
09:12:54	16	questions in the questionnaire.
09:12:55	17	Q. Could you please point in your
09:12:56	18	report to what you're referring to as to
09:12:58	19	those guidelines?
09:13:00	20	A. Sure. If you look at section --
09:13:37	21	Exhibit, is that F2? The tab is the
09:13:46	22	previous one. So in Exhibit F2 you see some
09:13:58	23	questions that ask about gender, QA1 is
09:14:03	24	about gender. QA2 is about the year that
09:14:07	25	was born. So guidelines would have been,

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09:14:11	1	because none of these matter, the general
09:14:13	2	guidelines would have begun with QA7 or QA8.
09:14:26	3	And QA9. So those would be the key
09:14:34	4	questions.
09:14:35	5	Q. Those are the key questions that
09:14:37	6	proctors asked people in the mall, or those
09:14:39	7	are the key questions that -- I'm sorry,
09:14:45	8	your assistant's name?
09:14:47	9	A. Lia Pasternack.
09:14:49	10	Q. Ms. Pasternack. Is it Ms. or
09:14:52	11	doctor?
09:14:52	12	A. Ms.
09:14:53	13	Q. Ms. Pasternack asked?
09:14:55	14	A. So my guidance to her was to
09:14:57	15	focus on ensuring that the people who
09:15:00	16	participate in the qualitative and the pilot
09:15:02	17	are those that are -- that are recruited
09:15:07	18	using those three questions.
09:15:24	19	Q. What answers did someone have to
09:15:26	20	give to those questions in order to be
09:15:29	21	brought to Ms. Pasternack by the proctors?
09:15:32	22	A. I believe there's a Word
09:15:44	23	document of this. This is a screen shot of
09:15:47	24	the survey, but there's also a Word document
09:15:50	25	that was given that would contain that.

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09:15:52	1	For example, in QA9, if someone
09:15:56	2	said I was not at all responsible for the
09:15:58	3	purchase of the Xbox game console, they
09:16:03	4	would be excluded from participating in the
09:16:06	5	survey.
09:16:10	6	Q. Would they be excluded from
09:16:12	7	participating in the interview with Ms.
09:16:16	8	Pasternack?
09:16:16	9	A. I mean they mean would be
09:16:18	10	participated in the interview with Ms.
09:16:21	11	Pasternack, yes.
09:16:27	12	Q. When she interviewed people, did
09:16:30	13	she interview two to three at a time or did
09:16:33	14	she interview them individually?
09:16:34	15	A. It is my understanding that she
09:16:36	16	did two to three at a time.
09:16:40	17	Q. Were any records kept as to the
09:16:46	18	demographics of these 30 people that she
09:16:49	19	interviewed?
09:16:49	20	A. I am not aware, and it would not
09:16:53	21	matter as far as what I was trying to
09:16:58	22	achieve from the objective of the staff.
09:17:01	23	Q. Are there any records of what
09:17:03	24	questions she asked during these interviews?
09:17:06	25	A. Again, the general guidelines

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09:17:09	1	given to her was to understand how people go
09:17:14	2	about making purchases of Xbox 360. Records
09:17:22	3	of that or even, you know, taking notes in
09:17:26	4	front of the survey respondents in general
09:17:29	5	would not be done in order to avoid biassing
09:17:35	6	any of the answers or getting people
09:17:36	7	concerned.
09:17:37	8	I'm not aware of any records.
09:17:45	9	Q. So it's your understanding that
09:17:46	10	she did not take any notes in front of the
09:17:49	11	individuals when she was conducting these
09:17:52	12	interviews?
09:17:52	13	A. Well I was briefed by her
09:17:55	14	verbally in terms of what inputs I needed
09:18:01	15	for the design of my survey. So I'm not
09:18:03	16	aware of what notes she kept after these
09:18:08	17	interviews.
09:18:12	18	Q. Are you aware of whether or not
09:18:13	19	she took notes during the interviews?
09:18:15	20	A. In general when -- when people
09:18:20	21	do exploratory research they're trained not
09:18:22	22	to take de- -- you know, notes in front of
09:18:26	23	the respondent. So as not to get them
09:18:30	24	providing conscious biased results, but
09:18:33	25	allowing for a more free flowing

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09:18:36	1	conversation.
09:18:43	2	Q. Is Ms. Pasternack your employee?
09:18:45	3	A. She's an employee of and leads
09:18:47	4	the team, yes.
09:18:49	5	Q. How long has she been employed
09:18:51	6	by your company?
09:18:53	7	A. She's been employed since, I
09:18:55	8	can't remember the exact date, but since
09:18:58	9	somewhere around 2009.
09:19:14	10	MS. THAYER: Let's mark as
09:19:15	11	Exhibit 339 a document with Bates
09:19:17	12	MOTM_WASH1823_0603556.
09:19:23	13	(PX Exhibit 339 for
09:19:23	14	identification, Bates stamped
09:19:55	15	MOTM_WASH1823_0603556.)
09:19:55	16	Q. Do you recognize this document?
09:19:56	17	A. I've not seen it before.
09:19:57	18	Q. Do you recognize the
09:19:59	19	handwriting?
09:19:59	20	A. Well, I can't, I mean I'm not a
09:20:10	21	handwriting expert here, but I would assume
09:20:12	22	this is probably Ms. Lia Pasternack's
09:20:15	23	handwriting. I'm going by that assumption.
09:20:17	24	Q. Why would you go by that
09:20:18	25	assumption?

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09:20:19	1	A. Because the notes on here are
09:20:20	2	things that she mentioned to me verbally and
09:20:24	3	briefed me as I was designing my survey.
09:20:42	4	MS. THAYER: Could you read that
09:20:43	5	answer back to me, please.
09:20:45	6	(Record read as requested.)
09:20:54	7	Q. How long did it take you
09:20:55	8	initially to design the survey?
09:20:57	9	A. And when you say how long, you
09:21:05	10	mean in terms of hours or --
09:21:08	11	Q. Hours, days, weeks, whatever
09:21:10	12	unit is comfortable to you?
09:21:12	13	A. So I don't have an exact answer
09:21:15	14	for that, but approximately I want to say,
09:21:18	15	you know, at least about eight to ten hours.
09:21:21	16	Q. Spread over how many days?
09:21:23	17	A. Again, I don't -- I don't have
09:21:28	18	an exact answer, but I would say one to two
09:21:31	19	days.
09:21:32	20	Q. Do you bill by the hour?
09:21:35	21	A. Not for the survey part of the
09:21:40	22	-- the survey and my report part of it is
09:21:44	23	not on the basis of an hourly rate.
09:21:50	24	Q. What have you charged in this
09:21:51	25	case for the survey?

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09:21:54	1	A. Again, there were two different
09:22:01	2	surveys. I don't remember the exact number,
09:22:03	3	but including all of our expenses related
09:22:07	4	to, so it would take into account the
09:22:09	5	expenses related to doing the various mall
09:22:12	6	intercepts, the online surveys, paying for
09:22:16	7	the sample, etc., I would assume it's
09:22:19	8	somewhere around 200, 225, I don't remember
09:22:22	9	the exact number.
09:22:25	10	Q. 200, 225?
09:22:27	11	A. Thousand dollars, $225,000, for
09:22:30	12	all of that, including the analysis for both
09:22:32	13	the surveys.
09:22:33	14	Q. Does that include the cost of
09:22:36	15	generating the report?
09:22:37	16	A. Everything, yes.
09:22:46	17	Q. When did the pilot testing
09:22:49	18	begin?
09:22:49	19	A. Again, I don't remember exact
09:22:57	20	dates. I'm assuming it would be after the
09:23:03	21	in-depth interviews were done, the surveys
09:23:06	22	would have been written by me, then the team
09:23:09	23	that -- the people who do the programming
09:23:12	24	would have programmed the survey, you know,
09:23:17	25	I guess another day for that programming

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09:23:19	1	activity and then the pilot tests would have
09:23:23	2	started after that.
09:23:24	3	Q. Who did the programming?
09:23:26	4	A. We have staff that do only
09:23:29	5	programming, yes.
09:23:30	6	Q. So it's employees of your
09:23:34	7	company?
09:23:34	8	A. Correct.
09:23:35	9	Q. And so you can't tell me what
09:23:39	10	day you started pilot testing the survey?
09:23:42	11	A. I don't remember the exact date,
09:23:45	12	but I'm -- I want to say it's probably
09:23:50	13	sometime towards the end of, early part of
09:23:54	14	July, I mean first week of July or so.
09:23:57	15	Q. Were you given a date by which
09:24:00	16	the survey needed to be completed?
09:24:02	17	A. I had been told that a report
09:24:10	18	was needed by sometime around the third week
09:24:12	19	of July, yes.
09:24:16	20	Q. You were told that at the time
09:24:17	21	you were retained?
09:24:18	22	A. At the time I was retained, yes.
09:24:21	23	Q. Were you working on any other
09:24:23	24	litigation survey at the same time?
09:24:25	25	A. No.

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09:24:26	1	Q. How many days did it take to do
09:24:33	2	the pilot testing of the survey, of the
09:24:36	3	surveys, excuse me?
09:24:37	4	A. I would -- I believe it took
09:24:41	5	about two days or two or three days, I don't
09:24:45	6	know the exact number of days.
09:24:46	7	Q. Were both surveys pilot tested
09:24:50	8	at the same time?
09:24:50	9	A. I don't recall exactly. That
09:24:55	10	would have been Lia Pasternack coordinating
09:25:00	11	that, so I don't know the, whether they were
09:25:05	12	done simultaneously or in parallel. I would
09:25:07	13	expect they would have done -- they would
09:25:09	14	have been done by her. And again, she
09:25:11	15	briefed me about how the pilot test went and
09:25:14	16	that's really all I needed for my purposes
09:25:18	17	in terms of what needed to be done next on
09:25:22	18	the analysis.
09:25:25	19	Q. Who besides Ms. Pasternack pilot
09:25:29	20	tested the surveys?
09:25:30	21	A. Well, again, I believe it was
09:25:32	22	done in the mall. So the same mall offices
09:25:39	23	would have been used to recruit. Lia served
09:25:45	24	as the moderator and she may have had
09:25:48	25	proctors who greeted and put people in front

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09:25:53	1	of the computer and all of those good
09:25:55	2	things, you know.
09:25:56	3	So I'm not absolutely clear
09:25:58	4	about exactly all the details of that. She
09:26:02	5	does it, she debriefs me and that's really
09:26:05	6	all I need.
09:26:05	7	Q. Did the recruits sit down to a
09:26:11	8	computer and take the survey on a computer?
09:26:13	9	A. It is my understanding that they
09:26:15	10	may have done that, yes.
09:26:29	11	Q. Were there multiple computers in
09:26:30	12	the room or just one?
09:26:33	13	A. Typically these mall office --
09:26:38	14	intercept offices would have multiple
09:26:41	15	computers. I don't know exactly how many.
09:26:43	16	I don't have a report of it. That doesn't
09:26:45	17	-- I don't need those reports or any such
09:26:48	18	thing to effect, you know, my look at the
09:26:51	19	survey or approval of the survey of the
09:26:53	20	analysis.
09:26:53	21	Q. Do you have a file that contains
09:26:56	22	the results of the pilot tests?
09:27:02	23	A. I don't use those or I don't
09:27:05	24	look at those. For me, all I need is a
09:27:09	25	debrief from Lia Pasternack about the issues

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09:27:11	1	encountered or things that need to be
09:27:15	2	changed. They're trained, they are people
09:27:17	3	who know what, you know, when they encounter
09:27:20	4	something they will brief me and accordingly
09:27:22	5	I would fix it.
09:27:24	6	Q. Did anyone other than Ms.
09:27:26	7	Pasternack moderate or supervise the
09:27:29	8	activity of the individuals who were doing
09:27:32	9	the pilot testing?
09:27:35	10	A. Not to my knowledge, I don't
09:27:37	11	know.
09:27:37	12	Q. Let me go back to the question I
09:27:42	13	just asked because I don't think I got an
09:27:44	14	answer. Is there a file that exists today
09:27:46	15	of the answers to the pilot studies?
09:27:53	16	A. It is my understanding that Lia
09:27:57	17	has given notes taken by, or any comments
09:28:04	18	provided by the people that did the pilot,
09:28:11	19	the respondents that did the pilot survey.
09:28:14	20	For my purposes, I did not rely on those in
09:28:16	21	my report. I relied strictly on verbal
09:28:21	22	comments that I received from Lia
09:28:24	23	Pasternack.
09:28:24	24	Q. What I'm asking is if at this
09:28:28	25	mall there were multiple computers and

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09:28:30	1	respondents took a pilot survey, have I got
09:28:34	2	it right so far?
09:28:34	3	A. That's correct.
09:28:35	4	Q. The results of those surveys,
09:28:39	5	are they available either hard copy or
09:28:42	6	electronically somewhere today?
09:28:44	7	A. I'm not aware. As I say, I
09:28:52	8	believe notes written by the respondents
09:28:55	9	were provided by Lia Pasternack to counsel.
09:28:58	10	Q. That's really a different
09:29:02	11	subject matter and I will go into that in
09:29:04	12	just a minute. But now I'm talking about
09:29:06	13	there's a survey, a pilot survey and it's
09:29:10	14	programmed into a computer and somebody is
09:29:13	15	on the computer taking that survey. Am I
09:29:16	16	right so far about what the pilot test
09:29:17	17	involved?
09:29:18	18	A. That's correct.
09:29:18	19	Q. All right. So did the computer
09:29:22	20	capture the results as the individuals took
09:29:26	21	the survey? Did the computer capture the
09:29:28	22	results?
09:29:28	23	A. I am not aware of those results.
09:29:31	24	If you -- if you put into actual data I'm
09:29:34	25	not aware of that. I did not need those or

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09:29:37	1	I did not use those results in any of my
09:29:39	2	analyses.
09:29:39	3	Q. But you don't know whether or
09:29:42	4	not the computer back in July when this
09:29:46	5	thing was pilot tested, whether the computer
09:29:48	6	captured the data from those pilot surveys?
09:29:52	7	A. I'm not aware of that, as I say.
09:29:56	8	Q. Who would be aware of that?
09:30:02	9	A. I would have to check with my
09:30:04	10	programmers to see if they actually, if
09:30:06	11	those things -- because again, all of these
09:30:08	12	surveys were done on the computers of the
09:30:13	13	field company, the mall intercept company.
09:30:16	14	So I don't know what they do with those.
09:30:21	15	Q. What field company is that?
09:30:23	16	A. I don't remember the exact name.
09:30:25	17	Lia Pasternack would know that.
09:30:33	18	Q. Did Ms. Pasternack provide any
09:30:41	19	written or oral information to the
09:30:43	20	respondents before they took the pilot
09:30:45	21	survey?
09:30:50	22	A. She would have -- you know, the
09:30:52	23	proctors would have brought -- again, I was
09:30:54	24	not there, so I don't know exactly. My
09:30:56	25	briefing to her is to essentially, and this

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09:31:00 1   is something that is standard when we do
09:31:02 2   pilot tests, my briefing to her was to
09:31:05 3   understand how -- whether people understood
09:31:09 4   the survey, if there were complexities in
09:31:12 5   taking the survey, for those to be record --
09:31:15 6   to be reported to me, and those were my
09:31:20 7   instructions.
09:31:20 8   So I'm assuming, you know, the
09:31:24 9   standard procedure would be, and given I was
09:31:28 10 not there, the standard procedure would be
09:31:31 11 when people are greeted and brought in
09:31:34 12 they're told what the purpose is verbally
09:31:38 13 and they're asked to complete the survey as
09:31:40 14 if they were normal respondents taking the
09:31:43 15 survey. And they would be asked to indicate
09:31:48 16 if they have any issues in understanding or
09:31:53 17 in taking the survey. You know, any issues,
09:31:59 18 administrative or otherwise, they would have
09:32:01 19 indicated or they would have been asked to
09:32:03 20 write, and I believe they were asked to
09:32:06 21 write, and some of those, that information
09:32:09 22 was provided.
09:32:10 23   Q.   So were each of the 60 pilot
09:32:16 24 survey respondents asked to indicate as they
09:32:20 25 took the survey whether or not they had any

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09:32:27 1   questions or didn't understand something?
09:32:30 2   A.   I believe that they would have
09:32:33 3   been asked to do that and they would have
09:32:35 4   been asked to do that, and they would have
09:32:36 5   been asked to, either to flag the moderator
09:32:38 6   or write it down, and it is my understanding
09:32:42 7   that they were asked to write it down and
09:32:44 8   provide it to -- and I believe Lia
09:32:47 9   Pasternack provided that to counsel. Again,
09:32:55 10 I do not rely on those information. I rely
09:32:57 11 on the brief that Lia Pasternack provides
09:33:00 12 me.
09:33:00 13   Q.   Did Ms. Pasternack note how long
09:33:17 14 it took each or any of the respondents to
09:33:22 15 complete either of the surveys?
09:33:23 16   A.   I'm not aware of that. And
09:33:27 17 again, that information was not needed for
09:33:33 18 me as far as my design of the survey.
09:33:37 19   Q.   Did any one of the 60
09:33:39 20 respondents ask any question or write down
09:33:43 21 any note while taking the survey?
09:33:45 22   A.   I wasn't in the room. I was
09:33:49 23 debriefed in terms of, you know, what was
09:33:57 24 encountered. I've subsequently seen the
09:34:02 25 notes that Lia provided counsel, and she had

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09:34:06 1   briefed me accordingly based on what was out
09:34:09 2   there.
09:34:23 3   MS. THAYER: Could you read my
09:34:24 4   question back.
09:34:24 5   (Record read as requested.)
09:34:25 6   Q.   Did you get that question
09:34:26 7   because I don't think I've gotten an answer
09:34:27 8   to that one yet?
09:34:29 9   A.   I believe that they did, you
09:34:33 10 know, there were comments written on the
09:34:36 11 piece of paper by the respondents.
09:34:43 12   Q.   Have you ever seen those
09:34:45 13 comments?
09:34:45 14   A.   I did not need to see those
09:34:47 15 comments. As I said, I was briefed by Lia
09:34:50 16 Pasternack. I only saw those comments
09:34:52 17 subsequently after they were provided by Lia
09:34:55 18 Pasternack to counsel.
09:34:55 19   Q.   That was within the last couple
09:34:59 20 of weeks that you saw those?
09:35:00 21   A.   Somewhere around that, after my
09:35:01 22 report was submitted.
09:35:08 23   MS. THAYER: We've been going
09:35:09 24 about an hour, would this be a
09:35:10 25 convenient time to take a break?

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09:35:14 1   THE VIDEOGRAPHER: One moment,
09:35:15 2   please, watch your microphones. I'll
09:35:17 3   change tapes now at this time. Here
09:35:19 4   now marks the end of tape 1 of the
09:35:21 5   deposition of Dr. R. Sukumar, the time
09:35:23 6   is 9:35 a.m., we're off the record.
09:40:16 7   (A recess was taken.)
09:49:30 8   THE VIDEOGRAPHER: Here now
09:49:42 9   marks the beginning of tape 2 of the
09:49:44 10 deposition of Dr. R. Sukumar. The
09:49:46 11 time is 9:49 a.m., we're back on the
09:49:49 12 record.
09:49:53 13   (PX Exhibit 340 for
09:49:53 14 identification, Bates stamped
09:49:54 15 MOTM_WASH1823_0603557 through 3586.)
09:49:54 16   Q.   We have marked as Exhibit 340 a
09:49:56 17 document that starts with the Bates number
09:49:58 18 MOTM_WASH1823_0603557 through 3586.
09:50:08 19   Dr. Sukumar, could you take a
09:50:10 20 look at this exhibit and let me know whether
09:50:12 21 or not you've seen any of these pages
09:50:14 22 before?
09:50:15 23   A.   I have not seen this at the time
09:50:23 24 of writing my report. I have seen it
09:50:28 25 subsequently after I submitted my report in

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09:50:30	1	the last couple of weeks, yes.
09:50:31	2	Q. What is your understanding as to
09:50:33	3	what this collection of documents is?
09:50:34	4	A. It is my understanding that
09:50:35	5	these are handwritten notes by -- you know,
09:50:43	6	this is a piece of paper that was given to
09:50:45	7	the participants of the pilot interview and
09:50:49	8	they were asked to note, as it says, they
09:50:54	9	were asked to note if there were any
09:50:56	10	questions, anything they didn't understand,
09:50:59	11	or anything that was not clear, as it says,
09:51:03	12	wording was unclear.
09:51:06	13	Q. Is it your testimony, for
09:51:10	14	example, if we look on the first page of
09:51:12	15	Exhibit 340, that this page was given to a
09:51:17	16	respondent of the pilot test?
09:51:21	17	A. Yes, it is my understanding that
09:51:27	18	that's what it was, yes.
09:51:29	19	Q. So is it your understanding that
09:51:30	20	the handwriting on this document is the
09:51:32	21	handwriting of a respondent and not the
09:51:37	22	handwriting of an employee of Optimal
09:51:40	23	Strategix Group?
09:51:40	24	A. That is what I'm given to
09:51:42	25	understand.

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09:51:42	1	Q. And who gave you that
09:51:44	2	understanding?
09:51:44	3	A. It is what Lia Pasternack
09:51:47	4	communicated to counsel and I was informed
09:51:48	5	of that.
09:51:49	6	Q. Wouldn't it be confusing to a
09:52:09	7	respondent to get a piece of paper that says
09:52:13	8	"Hi, my name is blank with Optimal Strategix
09:52:17	9	Group"?
09:52:18	10	MS. HOANG: Objection to form.
09:52:19	11	A. So the -- I would assume that
09:52:25	12	the proctors who handed this piece of paper
09:52:28	13	effectively told people as to why they were
09:52:31	14	giving them these -- this piece of paper,
09:52:33	15	and it was meant largely for the
09:52:35	16	participants to note it down.
09:52:37	17	I did not rely on any of this
09:52:40	18	information. I relied strictly on the
09:52:44	19	verbal debrief that I received from Lia
09:52:47	20	Pasternack about how, you know, whether the
09:52:49	21	survey was understood and if there was
09:52:52	22	anything that was unclear or we needed to
09:52:54	23	change in the survey.
09:52:55	24	So I was not present in the
09:52:57	25	room.

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09:53:00	1	Q. Would you look at the second
09:53:02	2	page of Exhibit 340. Do you have any
09:53:05	3	understanding as to who wrote down the words
09:53:08	4	"Pick top 5"?
09:53:11	5	A. I don't know who wrote "pick top
09:53:15	6	5."
09:53:15	7	Q. Do you have any belief as to
09:53:17	8	whether it was an employee of Optimal
09:53:26	9	Strategix Group or a respondent?
09:53:32	10	A. No, I would not know for sure.
09:53:35	11	Q. Do you know what the meaning of
09:53:36	12	those words is?
09:53:39	13	A. Well, again, this sheet of paper
09:53:42	14	represents the various attributes and levels
09:53:44	15	that we were looking at in terms of defining
09:53:48	16	the conjoint, and what is probably being
09:53:53	17	asked is to have the respondents look at
09:53:56	18	these and circle their top 5.
09:54:00	19	Q. Do you know what explanation
09:54:02	20	respondents were given before being asked to
09:54:05	21	circle numbers here?
09:54:06	22	A. I don't know the exact
09:54:09	23	response -- the exact instructions, but my
09:54:13	24	understanding would have been to say, pick
09:54:15	25	the top 5 but also read through it to see if

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09:54:17	1	there's anything here that is not understood
09:54:21	2	or unclear.
09:54:22	3	And so again, clearly the
09:54:24	4	purpose here is to make sure that what gets
09:54:26	5	done in the conjoint is understood by the
09:54:31	6	respondents.
09:54:36	7	Q. Did anything change in the
09:55:00	8	survey between the initial design and the
09:55:02	9	final design?
09:55:03	10	A. One of the things that, if
09:55:13	11	you'll look at the price points, we had
09:55:16	12	price points designed to be every $50
09:55:19	13	increments. One area that I recall that we
09:55:25	14	-- that was debriefed to me was that most
09:55:30	15	respondents seemed to indicate that, in
09:55:35	16	either the way they picked it or whatever
09:55:39	17	the case might be, that they picked it in
09:55:41	18	increments of a hundred dollars. And also,
09:55:46	19	it made sense therefore to look at the
09:55:48	20	survey, the conjoint and keep it in
09:55:53	21	increments of a hundred dollars. And that
09:55:55	22	was one area that we changed.
09:55:56	23	Q. What is it that respondents did
09:55:58	24	that caused you to change that?
09:56:00	25	A. I was debriefed by Lia

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09:56:04   1    Pasternack that the price points and
09:56:05   2    increments of $50 was not how respondents
09:56:10   3    saw, and they, there might have been one
09:56:16   4    person who may have mentioned it or whatever
09:56:18   5    the case might be, she indicated that the
09:56:20   6    preference would be to keep the price points
09:56:22   7    in increments of a hundred dollars and
09:56:24   8    that's what we did.  So we went $99 to 199,
09:56:29   9    199 to 299 and so on.
09:56:30   10       Q.   As you sit here today can you
09:56:32   11   tell me specifically what input she got from
09:56:35   12   respondents that caused her to debrief you
09:56:39   13   about the increments of 50 versus $100?
09:56:43   14       A.   I cannot say that.
09:56:46   15       Q.   What else changed between the
09:56:47   16   initial design of the survey and the final
09:56:53   17   design?
09:56:54   18       A.   So the first thinking of the
09:56:55   19   survey was not to include any graphical
09:57:03   20   images and then subsequently we did include,
09:57:08   21   I mean I would say that even for the pilot
09:57:13   22   the graphical image may have been shown.
09:57:21   23       The other aspect was the
09:57:22   24   question that we had asked initially about
09:57:25   25   what was the year and month in which you
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09:57:28   1    purchased your Xbox 360 and most people
09:57:36   2    could only remember approximately how many
09:57:40   3    months ago that they made a purchase but
09:57:43   4    could not really indicate a specific month
09:57:45   5    or a year, and I was debriefed about that.
09:57:48   6    And those were some changes that were made
09:57:50   7    to the final version.
09:57:51   8        Q.   Did that change occur between
09:57:54   9    the pilot study and the final, or did that
09:57:56   10   change occur as a result of the initial
09:58:02   11   interviewing that Ms. Pasternack did?
09:58:03   12       A.   You know, I can't recall exactly
09:58:13   13   when the changes were done, but I have a
09:58:14   14   feeling -- I mean as I said, I can't recall
09:58:17   15   -- the price points were changed at the end,
09:58:23   16   during the pilot survey.  Some of these
09:58:26   17   things were being done where as the inputs
09:58:28   18   were received the surveys were being
09:58:31   19   corrected.  So I can't say that for sure.  I
09:58:36   20   was -- I was briefed along the way.
09:58:39   21       Q.   Do you know whether or not the
09:58:40   22   graphical images contained in the pilot
09:58:43   23   survey were the same as the graphical images
09:58:46   24   in the final survey?
09:58:47   25       A.   I believe so.
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09:58:52   1        Q.   So what input did you receive
09:58:54   2    from Ms. Pasternack or otherwise about
09:58:56   3    graphical images?
09:59:11   4        A.   When you say what input, can you
09:59:13   5    be more precise?  I mean...
09:59:17   6        Q.   You testified that the first
09:59:22   7    thinking was not to include graphical images
09:59:25   8    but then that changed, and I'm asking you
09:59:27   9    what input you got from Ms. Pasternack with
09:59:29   10   respect to that subject matter?
09:59:31   11       A.   Right.  I believe, for example,
09:59:34   12   the Wi-Fi adapter needed to be included as
09:59:47   13   part of the survey, yes.  So there was
09:59:50   14   request to describe certain things in
09:59:54   15   graphical images, and those were included.
09:59:57   16       Q.   Anything other than the Wi-Fi
09:59:59   17   adapter requested?
10:00:00   18       A.   I don't -- I don't recall from
10:00:02   19   the top of my head here, but, you know, the
10:00:04   20   ones that were discussed by Lia were
10:00:12   21   included in the survey.
10:00:13   22       Q.   Is there anything else that
10:00:15   23   changed between the pilot survey and the
10:00:16   24   final survey that you haven't already
10:00:20   25   described for me?
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10:00:28   1        A.   Not to the best of my knowledge.
10:00:32   2        Q.   Did any of the questions that
10:00:34   3    had been programmed into the computers
10:00:38   4    change?
10:00:47   5        A.   So after the pilot surveys were
10:00:49   6    completed, counsel had requested the
10:00:52   7    inclusion of a question that dealt with
10:01:03   8    video scanning of video content and that,
10:01:11   9    and that question was included in the
10:01:12   10   survey.
10:01:12   11       Q.   Can you look at your report and
10:01:14   12   identify that question for me, please.
10:02:00   13       A.   That would be question QH5A1 on
10:02:04   14   Exhibit F2.  I don't have a page number.
10:02:10   15       Q.   Could you just read the question
10:02:14   16   into the record so we're clear.
10:02:16   17       A.   Sure, it says "Please select
10:02:18   18   the types of video content you have viewed
10:02:22   19   on your Xbox Console (connected to your TV).
10:02:27   20   (Please select all that apply)  interlaced,
10:02:32   21   progressive, not sure.
10:02:36   22       QH5A2, for those who checked
10:02:39   23   interlaced "please select the types of video
10:02:42   24   content you have viewed on your Xbox Console
10:02:46   25   (connected to your TV).  (Please select all
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10:02:48	1	that apply) MBAFF, (Macroblock Adaptive
10:02:53	2	Frame or field, progressive, not sure."
10:02:56	3	Q. Both of those questions were
10:02:59	4	introduced into the survey at the request of
10:03:01	5	counsel; is that right?
10:03:02	6	A. That's correct.
10:03:02	7	Q. At the time that you included
10:03:05	8	these in the final survey, did you have an
10:03:08	9	understanding as to what interlaced video
10:03:11	10	content was?
10:03:13	11	A. I'm not a technical expert, and
10:03:15	12	I personally don't, don't have any knowledge
10:03:18	13	of that.
10:03:18	14	Q. How about progressive video
10:03:22	15	content, did you have an understanding as to
10:03:24	16	what that was at the time that this survey
10:03:27	17	was conducted?
10:03:28	18	A. Yes, not a technical expert. I
10:03:31	19	have some lay understanding of it, but it --
10:03:36	20	I have -- I have no personal understanding
10:03:38	21	of it.
10:03:39	22	Q. How about MBAFF, did you have
10:03:42	23	any understanding of that term at the time
10:03:43	24	that this survey was conducted?
10:03:45	25	A. No, I didn't have any

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10:03:46	1	understanding of it.
10:03:47	2	Q. During the interviews conducted
10:03:52	3	by Ms. Pasternack, the first set of
10:03:56	4	interviews, did any of the individuals that
10:04:01	5	she interviewed mention interlaced video
10:04:05	6	content?
10:04:06	7	A. Not to my knowledge. At least I
10:04:10	8	was not debriefed about that.
10:04:12	9	Q. Did any of them mention
10:04:13	10	progressive video content, to your
10:04:15	11	knowledge?
10:04:16	12	A. Not to my knowledge.
10:04:16	13	Q. Did any of them mention MBAFF,
10:04:19	14	to your knowledge?
10:04:20	15	A. No, not to my knowledge.
10:04:27	16	Q. Did any of them mention H.264?
10:04:32	17	A. I don't know. I was -- not to
10:04:34	18	my knowledge. They did not seem to have an
10:04:36	19	issue with it at least.
10:04:40	20	Q. I'm focusing now on the first
10:04:42	21	set of interviews that Ms. Pasternack did.
10:04:45	22	At that time, did any of the 30 people she
10:04:48	23	talked to mention H.264?
10:04:53	24	A. Not to my knowledge.
10:05:01	25	Q. Did any of them mention 802.11?

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10:05:05	1	A. I mean the term Wi-Fi seemed to
10:05:09	2	be commonly used.
10:05:14	3	Q. How about the term 802.11?
10:05:21	4	A. From what I understand nobody
10:05:24	5	indicated that, at least I wasn't debriefed
10:05:28	6	that people didn't understand the term
10:05:31	7	802.11 or the term Wi-Fi.
10:05:33	8	Q. That's not my question. My
10:05:34	9	question is during the initial set of 30
10:05:36	10	interviews did any of the respondents
10:05:39	11	mention 802.11?
10:05:41	12	A. I don't recall.
10:05:46	13	Q. All right. Now, let's go back
10:05:48	14	to Exhibit 340. This is the pilot testing
10:05:59	15	document as I understand it?
10:06:00	16	A. Correct.
10:06:00	17	Q. Was this document handed to
10:06:06	18	respondents after they had completed the
10:06:08	19	survey?
10:06:09	20	A. Again, I did not rely on this
10:06:14	21	document in designing my survey. I relied
10:06:17	22	on the verbal debrief for the purposes of
10:06:20	23	conforming my questions. I was not present
10:06:24	24	in the room when these pilot surveys were
10:06:27	25	done. It is my understanding that they

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10:06:29	1	were, the proctors handed these out. I am
10:06:37	2	not absolutely sure whether they were handed
10:06:38	3	out -- I expect that they would have been
10:06:41	4	handed out right at the beginning as they
10:06:42	5	were agreed to and then brought in and be
10:06:47	6	told to take notes or keep notes.
10:06:52	7	So I'm not sure exactly, I
10:06:55	8	cannot confirm that.
10:06:56	9	Q. You would expect that they'd be
10:06:58	10	given these documents before they took the
10:07:00	11	survey because it's important before the
10:07:04	12	respondents take the survey that they
10:07:06	13	understand that you're interested to find
10:07:10	14	out if anything is confusing, right?
10:07:14	15	MS. HOANG: Objection; form.
10:07:16	16	A. My -- they need a -- as they
10:07:17	17	take the survey, the survey they're taking
10:07:19	18	is very much in the same setting as if they
10:07:24	19	were taking it at their homes, and so as a
10:07:26	20	result, the sheet of paper, it really does
10:07:29	21	not impact whether they get it at the
10:07:32	22	beginning or the end.
10:07:33	23	As they go through it, if they
10:07:35	24	don't understand something, they will have
10:07:37	25	raised their hands, they know that the

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10:07:39	1	proctor and the moderator were around, if
10:07:42	2	they didn't have the piece of paper. If
10:07:44	3	they had the piece of paper and had been
10:07:46	4	instructed to do so, they would have kept
10:07:48	5	track and kept notes and discussed that.
10:07:50	6	For the purposes of my designing
10:07:51	7	the survey, I fundamentally needed to know
10:07:54	8	if there were, out of 60 interviews if
10:07:59	9	people were raising issues about language
10:08:01	10	that was not clear or steps in taking the
10:08:05	11	survey that presented issues or questions,
10:08:11	12	and as far as the debrief I got, I used that
10:08:14	13	to design my final survey.
10:08:16	14	Q. The first page of Exhibit 340
10:08:19	15	reads as though it is something that's
10:08:21	16	either read to a respondent or given to a
10:08:24	17	respondent after the respondent has taken
10:08:27	18	the survey, wouldn't you agree with that?
10:08:30	19	MS. HOANG: Objection; form.
10:08:31	20	A. This, well, this is a piece of
10:08:33	21	paper that, you know, was given to them as a
10:08:36	22	way, you know, to keep notes. I mean
10:08:38	23	whether it says things like the way someone
10:08:42	24	were talking to them, at the end of the day
10:08:44	25	you're greeting people, human beings, you

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10:08:46	1	want to be kind of very colloquial with
10:08:48	2	them. The way it is written is really a
10:08:50	3	representation of trying to be more friendly
10:08:53	4	and colloquial with people and that's how
10:08:55	5	it's written. So I would not, you know,
10:08:57	6	classify it as being used one way or the
10:08:59	7	other.
10:09:00	8	Q. Well, Dr. Sukumar, doesn't it
10:09:02	9	say "Overall, when you were taking the
10:09:04	10	survey"? Doesn't that imply that the person
10:09:07	11	reading this document has already taken the
10:09:11	12	survey?
10:09:11	13	A. Well, again, I mean this is
10:09:14	14	simply for the purposes of note taking for
10:09:17	15	the survey -- for the respondent. The
10:09:19	16	language there is colloquial. The language
10:09:23	17	there is largely, you know, you're looking
10:09:26	18	at people coming in here who are people off
10:09:29	19	the street. You're talking to them in
10:09:31	20	colloquial language and that's really how it
10:09:34	21	is expressed.
10:09:34	22	Q. But you don't know as a fact
10:09:36	23	that this document or this form was given to
10:09:39	24	any respondent before they took the survey,
10:09:41	25	do you?

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10:09:42	1	A. It doesn't impact my -- all I
10:09:45	2	need to know, and which is what was given to
10:09:47	3	me is, if there were hiccups, if there were
10:09:51	4	things that were not clear, if people
10:09:54	5	consistently flagged, I needed to know that
10:09:56	6	and that information was provided to me.
10:10:06	7	MS. THAYER: Could you read my
10:10:07	8	question back.
10:10:08	9	(Record read as requested.)
10:10:08	10	A. I was not in the room, so I
10:10:10	11	don't have -- I don't know for a fact.
10:10:11	12	Q. Did Ms. Pasternack indicate to
10:10:16	13	you that any of the 60 respondents in the
10:10:20	14	pilot test did indicate during the process
10:10:25	15	of taking the survey that any of the
10:10:27	16	questions were difficult to understand?
10:10:31	17	MS. HOANG: Objection; form.
10:10:32	18	A. I think I already mentioned the
10:10:35	19	one question which we changed had to do with
10:10:42	20	what was the month and year that the Xbox
10:10:47	21	was purchased, was changed to how long ago
10:10:52	22	it was purchased in terms of number of
10:10:54	23	months.
10:10:54	24	So she did indicate, and I think
10:10:56	25	there are, as I read through it now, there

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10:10:58	1	are comments when someone had a concern with
10:11:00	2	a question, they did say something about it.
10:11:07	3	MS. THAYER: Could you read my
10:11:08	4	question back.
10:11:09	5	(Record read as requested.)
10:11:25	6	A. So difficult to understand, no.
10:11:33	7	She did not indicate that people had any
10:11:35	8	difficulty in terms of understanding the
10:11:37	9	questions.
10:11:37	10	Q. Did Ms. Pasternack indicate that
10:11:42	11	any of the 60 respondents said anything
10:11:46	12	during the process of taking the survey?
10:11:50	13	A. I mentioned a little while ago
10:11:52	14	difficulty to answer which was the month and
10:11:56	15	year question that I mentioned, and I
10:11:59	16	brought that to her attention and we made
10:12:01	17	those changes.
10:12:17	18	Q. And that was the only thing that
10:12:18	19	any of the 60 respondents mentioned during
10:12:23	20	the course of taking the survey?
10:12:24	21	A. As debriefed by me -- debriefed
10:12:30	22	to me by Lia Pasternack, that's basically
10:12:32	23	the changes, yes.
10:12:34	24	Q. Is that unusual to have so few
10:12:37	25	questions raised about a survey?

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10:12:40 1   A. No, it's not unusual, because
10:12:42 2 this is a very commonplace survey. You're
10:12:46 3 doing a consumer-based survey. The, as a
10:12:51 4 company, I -- and we've done a large number
10:12:56 5 of surveys with consumers, we write them in
10:12:58 6 a manner that the language is very
10:13:01 7 colloquial and easy to understand. So it's
10:13:03 8 not commonplace.
10:13:06 9   Q. Did the pilot survey contain
10:13:10 10 questions about H.264?
10:13:13 11   A. I don't have a copy of the pilot
10:13:29 12 survey here in front of me, but you can see
10:13:34 13 right here in the pilot survey, this page
10:13:36 14 was given where the mention of H.264 is out
10:13:41 15 here, so. So the answer would be yes.
10:13:57 16   Q. Other than what you see on
10:14:00 17 Exhibit 340, did the pilot survey make
10:14:03 18 reference to H.264?
10:14:05 19   A. No, I don't have the pilot
10:15:21 20 survey questionnaire in front of me, but I
10:15:24 21 would -- I would believe that it was, it did
10:15:26 22 include reference to H.264 and the
10:15:29 23 description around.
10:15:31 24   Q. What were the last words you
10:15:32 25 said?

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10:15:32 1   A. I say I don't have the survey,
10:15:34 2 the pilot survey, the exact pilot survey in
10:15:38 3 front of me, but I would, by looking at the
10:15:42 4 sheet of paper here on Exhibit 340, and
10:15:46 5 looking at the survey I would expect, I
10:15:49 6 assume that H.264 with its explanation was
10:15:53 7 included on the survey.
10:15:54 8   Q. Did the pilot survey mention
10:15:57 9 progressive video content?
10:16:01 10   A. I mentioned that that particular
10:16:03 11 question, QH5A1 and 5A2 was included after
10:16:08 12 the pilot survey.
10:16:10 13   Q. So in other words, if I look at
10:16:15 14 Exhibits F1 and F2, is it your testimony
10:16:21 15 that those are the same as the pilot survey
10:16:26 16 except for QH5A1 and A2 which were added
10:16:32 17 after the pilot?
10:16:34 18   A. I also mentioned that the
10:16:37 19 conjoint price points were changed. I also
10:16:41 20 mentioned that the question related to the
10:16:49 21 year and month in which the model -- the box
10:16:51 22 was purchased was changed to just how many
10:16:54 23 months. So if you look at question QA10,
10:16:57 24 when was the Xbox Console purchased, the
10:17:00 25 original question was in months, you know,

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10:17:02 1 what year and month and the final one was
10:17:08 2 listed in terms of a categorical question.
10:17:15 3   Q. Thank you. Before I mark the
10:17:53 4 next exhibits, just a couple more questions.
10:17:55 5 How did you arrive at the decision to test
10:17:58 6 -- excuse me, to do a pilot study with 30
10:18:03 7 respondents for each of the surveys?
10:18:06 8   A. Well, one of my references --
10:18:15 9 you know, in general, the practice is to do
10:18:17 10 between 25 to 50 or 75 depending on the
10:18:27 11 availability of respondents, the nature and
10:18:29 12 complexity of the questionnaires and several
10:18:31 13 other factors.
10:18:32 14   There is no hard-and-fast
10:18:34 15 requirement, in fact, the book by Shari
10:18:41 16 Diamond, the reference that I have, also
10:18:44 17 talks about anywhere between 25 to 75 and so
10:18:49 18 we chose the number 30. I mean there's no
10:18:54 19 -- it's -- it's an arbitrary number
10:18:57 20 reasonable enough to allow you to gauge
10:18:59 21 along the way if there are any comments or
10:19:02 22 questions or any changes that need to be
10:19:04 23 made, and that's basically how we chose it.
10:19:13 24   Q. How do you know when you have
10:19:14 25 done enough pilot testing of a particular

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10:19:20 1 draft survey?
10:19:20 2   A. Again, the practice here is that
10:19:29 3 moderators who do the pilot testing often
10:19:31 4 brief you. They are aware and comfortable
10:19:35 5 when they gauge that respondents taking the
10:19:39 6 survey have ease in completing it, have
10:19:45 7 clarity in understanding the questions. In
10:19:49 8 the case of, you know, one example, the
10:19:52 9 ability to actually remember and answer the
10:19:54 10 question as well.
10:19:55 11   So when you see after a certain
10:19:59 12 point in time that there are no comments,
10:20:03 13 you feel like, you feel comfortable.
10:20:05 14   It's not something that I
10:20:08 15 oversee. For me, the inputs are simply from
10:20:12 16 my moderator to say here are the changes
10:20:16 17 suggested -- well, my moderator would come
10:20:24 18 back with comments if there were any changes
10:20:26 19 suggested by the respondents. And if there
10:20:31 20 weren't any, we would be comfortable with
10:20:34 21 launching the survey.
10:20:36 22   Q. Did Ms. Pasternack or anybody
10:20:38 23 else ask any of the 60 respondents if they
10:20:41 24 knew what 802.11 was?
10:20:44 25   A. I am not aware of that.

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10:20:49	1	Q. Did they ask anyone if they
10:20:53	2	understood what H.264 was?
10:20:55	3	A. Again, I'm not aware of that.
10:20:59	4	Q. Did they ask anyone whether they
10:21:04	5	understood what MBAFF was?
10:21:06	6	A. That question was not pilot
10:21:09	7	tested.
10:21:09	8	Q. Exhibit 340 instructs "Probe by
10:21:27	9	asking was there anything else?" Do you
10:21:31	10	know whether or not any of the respondents
10:21:35	11	were probed by Ms. Pasternack or anyone else
10:21:38	12	with respect to the pilot survey?
10:21:43	13	A. See this is -- I'm not aware of
10:21:48	14	that. This is a qualitative kind of
10:21:49	15	exploratory exercise. This is done by
10:21:52	16	trained moderators. If, you know, they
10:21:55	17	probe and they got something that needed to
10:21:57	18	be changed, I would have been briefed about
10:22:00	19	it. So for me, one way or the other, this
10:22:04	20	is not meant to be a conclusive survey, this
10:22:07	21	is meant to be largely guidance on what
10:22:10	22	people understood, what was not clear, you
10:22:12	23	know, what were issues with the task that
10:22:14	24	they were completing.
10:22:20	25	MS. THAYER: Let's mark the next

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10:22:22	1	exhibit, a letter dated August 3,
10:22:24	2	2012, to myself, from Mr. Schoenhard.
10:22:41	3	(PX Exhibit 341 for
10:22:41	4	identification, letter dated August 3,
10:22:41	5	2012, to Ms. Thayer from Mr.
10:22:46	6	Schoenhard.)
10:22:46	7	Q. Have you seen this document
10:22:47	8	before?
10:23:32	9	A. Yes, after my -- after my
10:23:33	10	report. Again, I haven't seen -- I don't
10:23:35	11	recall seeing the exact letter, but some of
10:23:40	12	this information was given by my field team,
10:23:40	13	yes.
10:23:48	14	Q. Do you know who from your field
10:23:49	15	team provided this information?
10:24:18	16	A. That would be Lia Pasternack
10:24:21	17	pointing out to the use of Authentic
10:24:22	18	Response here, because they were the ones
10:24:24	19	that were used to provide us with a sample
10:24:27	20	for conducting the survey.
10:24:29	21	Q. When was Authentic Response
10:24:32	22	first contacted with respect to this survey?
10:24:35	23	A. I would -- I don't remember the
10:24:38	24	exact date, but I would expect just around
10:24:40	25	the time we were engaged, just immediately

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10:24:42	1	after we were engaged Authentic Response
10:24:45	2	would have been reached out to, to indicate
10:24:51	3	that we were, you know, would need them to
10:24:56	4	provide us with sample and all the details,
10:24:59	5	yes.
10:24:59	6	Q. When was the invitation sent out
10:25:02	7	to the Authentic Response panel to
10:25:05	8	participate in the survey?
10:25:06	9	A. The -- I'm not -- I'm not aware
10:25:11	10	of the exact dates. Again, that's part of
10:25:13	11	the process. When the survey's programmed,
10:25:17	12	the programmers send a certain link, set of
10:25:21	13	links to Authentic Response and again,
10:25:24	14	authentic response may have someone on their
10:25:26	15	team as a project manager that receives
10:25:29	16	those links, tests them, and then
10:25:31	17	essentially launches it to their panel
10:25:34	18	members.
10:25:40	19	Q. Would you look at on Exhibit F1
10:25:48	20	question QA7. If a respondent checked any
10:26:27	21	of the boxes other than "none of the above"
10:26:31	22	in QA7 were they then disqualified from the
10:26:33	23	survey?
10:26:35	24	A. It would have been none of the
10:26:46	25	above and some of the other options there as

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10:26:48	1	well. Like Microsoft Xbox would be another
10:26:52	2	one, if they checked on that. I mean again,
10:26:55	3	the original Word document actually has
10:26:57	4	programming instructions and everything and
10:27:01	5	I don't have that here in front of me to
10:27:02	6	tell you exactly which ones were screened
10:27:06	7	out.
10:27:07	8	Q. How did you go about deciding
10:27:08	9	which ones to screen and which not to
10:27:11	10	screen?
10:27:11	11	A. Well, typically, anyone who had,
10:27:15	12	who has used the Xbox 360, so anyone
10:27:18	13	checking none of the above would be screened
10:27:22	14	in. That means they wouldn't be able to
10:27:23	15	participate in the survey. Anyone -- sorry,
10:27:27	16	I need to clarify this. Again, anyone who
10:27:31	17	checked Microsoft Xbox would be screened
10:27:33	18	out.
10:27:37	19	Q. How about Blu-Ray Players?
10:27:40	20	A. They would also be screened out.
10:27:50	21	Q. How about computers or printers?
10:27:52	22	A. They would be allowed to
10:27:56	23	participate.
10:27:57	24	Q. And why is that?
10:27:58	25	A. Again, it does not pertain to,

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10:28:06	1	you know, Xbox and therefore they would be
10:28:08	2	allowed to participate.
10:28:18	3	Q. What was the gift that was
10:28:23	4	provided?
10:28:23	5	A. Authentic Response manages their
10:28:26	6	panels and they provide certain points based
10:28:29	7	on the length of the interview. Those
10:28:35	8	points are given either in the -- I don't
10:28:37	9	know the exact form of the gift that was
10:28:38	10	given, but they have a certain process. I
10:28:41	11	don't manage that process. But there's an
10:28:43	12	approximate dollar amount that ranges
10:28:49	13	somewhere from seven to $11 for whatever the
10:28:53	14	gift is that they decide.
10:28:54	15	Q. If an individual is screened
10:28:57	16	out, does that individual get the gift?
10:28:59	17	A. I need to reread the Authentic
10:29:05	18	Response, but from what I recall from the
10:29:06	19	top of my understanding, if they're screened
10:29:09	20	out, they are not given that gift.
10:29:12	21	Q. Were the respondents to the
10:29:25	22	pilot survey given a gift?
10:29:27	23	A. I don't recall, but the mall
10:29:35	24	intercept would -- I don't recall the exact
10:29:37	25	amount or what the nature of it. In

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10:29:40	1	recruiting these people to spend 20 minutes
10:29:43	2	or whatever amount of time they take, they
10:29:48	3	would need to be compensated in some
10:29:51	4	fashion, so there would be some compensation
10:29:54	5	attached to that. And it is common practice
10:29:58	6	to do that.
10:30:02	7	Q. Were they given their gift
10:30:04	8	before or after they completed the
10:30:08	9	handwritten, or excuse me, the form that we
10:30:10	10	saw in Exhibit 340?
10:30:12	11	A. Again, I wasn't in the room.
10:30:13	12	The standard procedures for all of these
10:30:16	13	are, whether it's the points for the online
10:30:19	14	survey or whether it is the, you know, gift
10:30:22	15	for participating in a mall intercept
10:30:26	16	survey, they're always given at the end.
10:30:49	17	Q. Do you know what a speeder is?
10:30:56	18	A. In what context?
10:31:00	19	Q. In the context of a respondent
10:31:03	20	taking a survey?
10:31:03	21	A. If I understand what you're --
10:31:08	22	you're saying, it's someone who's probably
10:31:10	23	taking a survey, you know, rapidly in going
10:31:14	24	through the survey, yes.
10:31:15	25	Q. On the basis of the pilot

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10:31:22	1	testing, did you form any sort of estimate
10:31:25	2	or conclusion about how long approximately
10:31:28	3	it should take to complete either of the
10:31:31	4	surveys?
10:31:32	5	A. No, I did not form and it wasn't
10:31:35	6	necessary for me to form those conclusions.
10:31:38	7	Q. Why is that?
10:31:39	8	A. A survey is done online and at
10:31:43	9	someone's home, it reflects how people make
10:31:47	10	purchases. There's a portion of the survey
10:31:50	11	that reflects how people make purchases.
10:31:53	12	There are those who make, tend to make them
10:31:56	13	faster or those who deliberate on it for a
10:32:00	14	long time before they make choices.
10:32:01	15	There is really no one cutoff or
10:32:04	16	single answer, and therefore it is
10:32:05	17	absolutely not necessary for me to set any
10:32:09	18	parameters around that.
10:32:10	19	Q. Well, if you don't have any
10:32:12	20	notion of how long typically it would take
10:32:14	21	to take a survey, how could you identify a
10:32:16	22	speeder from a normal survey taker?
10:32:20	23	A. Well, as I said, I mean it's --
10:32:25	24	the survey is taken by people and they're
10:32:29	25	sitting at home. And if they took it

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10:32:32	1	rapidly, that represents how they look at
10:32:36	2	things. And not everybody is a speeder
10:32:38	3	according to your definition.
10:32:40	4	Again, and clearly it's
10:32:46	5	reflective of consumers out there, and as a
10:32:50	6	result, we don't need to specifically be
10:32:53	7	focused on that.
10:32:56	8	Q. So is it irrelevant to you what
10:33:01	9	the average length of time it took for
10:33:06	10	respondents to complete the final survey
10:33:11	11	that's attached to your report?
10:33:12	12	A. When I look at the analysis of
10:33:17	13	the report, it's based on respondents who
10:33:22	14	take surveys. There are people who take
10:33:24	15	surveys. There are people who tend to take
10:33:27	16	-- answer questions quickly. There are
10:33:29	17	people who tend to deliberate and answer
10:33:32	18	questions in a lot slower fashion. So you
10:33:34	19	get the whole gamut of the spectrum.
10:33:37	20	When you analyze and you report,
10:33:38	21	you know, summary of results and you have a
10:33:41	22	large enough sample, you're really
10:33:43	23	reflecting more the average, you're
10:33:45	24	reflecting what the mean is.
10:33:47	25	As a result, there's really no

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10:33:49	1	reason to look at those speeders
10:33:52	2	exclusively.
10:34:13	3	MS. THAYER: Let's mark as the
10:34:15	4	next exhibit, 342, a letter dated
10:34:20	5	August 7, 2012, to me from Mr.
10:34:30	6	Schoenhard.
10:34:31	7	(PX Exhibit 342 for
10:34:31	8	identification, letter dated August 7,
10:34:31	9	2012, to Ms. Thayer from Mr.
10:34:38	10	Schoenhard.)
10:34:38	11	Q. Are you familiar with this
10:34:40	12	exhibit?
10:34:44	13	A. So I haven't actually seen the
10:35:07	14	letter itself, but in terms of the contents
10:35:09	15	or any clarifications, you know, I would
10:35:15	16	have provided it if counsel had asked me or
10:35:17	17	any such thing.
10:35:27	18	MS. THAYER: Can I hear the last
10:35:29	19	half of his answer.
10:35:30	20	(Record read as requested.)
10:35:30	21	Q. Do you know whether the
10:35:31	22	information in this document is accurate?
10:35:39	23	MS. HOANG: Objection; form.
10:35:57	24	A. So not going through every
10:35:59	25	single table and exhibits here, but in

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10:36:01	1	general, the content here in the first three
10:36:03	2	paragraphs are accurate. I mean there's
10:36:06	3	nothing there withholding the content there
10:36:09	4	and some of these other items, again, are
10:36:11	5	accurate.
10:36:12	6	Q. On the second page, item 9 and
10:36:16	7	11 it says "Pre-test interviews were
10:36:18	8	conducted by Lia Pasternack." Do you see
10:36:22	9	that?
10:36:22	10	A. Yes.
10:36:22	11	Q. Was there any information about
10:36:31	12	any pre-test interview that Ms. Pasternack
10:36:35	13	conducted that you haven't already provided
10:36:38	14	me here this morning?
10:36:47	15	A. I think I mentioned that QH5A1
10:36:51	16	and 5A2 were not pre-tested. They were, you
10:36:55	17	know, the questions they asked were very
10:36:57	18	simple. I didn't need to pre-test those.
10:37:00	19	I've, to the best of my
10:37:06	20	knowledge and my memory, I've given you,
10:37:10	21	I've told you everything that I know.
10:37:11	22	I was debriefed by Lia
10:37:14	23	Pasternack and those, the debriefings from
10:37:18	24	her were used in finalizing the survey that
10:37:23	25	was fielded, so.

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10:37:28	1	Q. How did you conclude that you
10:37:29	2	did not need to pre-test questions QA51 and
10:37:35	3	2?
10:37:36	4	A. So QA5 -- QH5A1 and 5A2 so if I
10:37:45	5	can look back at my survey for a second,
10:37:48	6	Exhibit F2. The question itself is written
10:38:00	7	in a very simple language in terms of the
10:38:07	8	words used, "Please select the types of
10:38:09	9	video content you have viewed on your Xbox
10:38:13	10	Console."
10:38:14	11	The question has been asked in a
10:38:16	12	very simple manner and similar to some of
10:38:23	13	the other questions that have been asked.
10:38:25	14	In the choices the respondent
10:38:26	15	has been given the option of saying not
10:38:28	16	sure. If they have, if they don't
10:38:31	17	understand interlaced, they're not aware of
10:38:33	18	progressive, they're not aware of
10:38:35	19	interlaced, they do have the option of
10:38:37	20	checking not sure.
10:38:38	21	The same is the case with QH5A2,
10:38:42	22	the language of the words used out there,
10:38:47	23	you know, in survey design we are -- we
10:38:49	24	design the question in very simple terms and
10:38:52	25	that's basically very simple language that's

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10:38:56	1	being asked out there, so there's no need to
10:38:59	2	pre-test that.
10:39:00	3	Terms like interlaced, MBAFF,
10:39:05	4	these are similar terms like Wi-Fi, and
10:39:08	5	they're technical. Some may know them, some
10:39:10	6	may not know them.
10:39:11	7	Q. If counsel had provided you
10:39:13	8	those questions before you did your pilot
10:39:17	9	study, would you have included them in the
10:39:19	10	pre-test?
10:39:19	11	A. I would have included them in my
10:39:21	12	pre-test.
10:39:21	13	Q. Why?
10:39:22	14	A. Because they were given to me --
10:39:24	15	they would have been given -- they would
10:39:25	16	have been given initially and I would have
10:39:28	17	included them. And one would have to ask,
10:39:33	18	you know, was it a question that people
10:39:35	19	didn't understand or was it the options
10:39:37	20	given to them.
10:39:38	21	If the options they didn't
10:39:39	22	understand, that would be reflected in the
10:39:43	23	answers that they provide because they would
10:39:45	24	say I'm not sure. That would indicate, you
10:39:47	25	know, very well that there's a big

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10:39:50	1	percentage in the market, or a small
10:39:52	2	percentage of the market who don't
10:39:53	3	understand, who don't know what they're
10:39:56	4	getting and that there are connoisseurs who
10:39:59	5	know what they're getting. So as far as the
10:40:02	6	question itself is concerned, it would be
10:40:03	7	included in the pre-test and I would expect
10:40:05	8	that that question, as it stands, would be
10:40:07	9	very much understood by everybody the way it
10:40:09	10	is.
10:40:09	11	It's very reflective of some of
10:40:11	12	the other questions we asked.
10:40:12	13	Q. So in your experience,
10:40:15	14	respondents to surveys would always check
10:40:20	15	not sure if they don't understand the
10:40:23	16	answers?
10:40:23	17	A. Absolutely. I mean they --
10:40:26	18	especially if you're a group like this, the
10:40:28	19	people who play Xbox games, who are online
10:40:31	20	and who are, you know, are technologically
10:40:39	21	savvier, you're more likely to get them to
10:40:42	22	answer not sure if they don't understand
10:40:44	23	what it is, if the...
10:40:57	24	Q. You just testified it was a
10:40:59	25	group who plays Xbox games, but none of your

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10:41:03	1	screener questions asked that question, so
10:41:05	2	how do you know that you were interviewing a
10:41:07	3	group that plays Xbox games?
10:41:14	4	A. I used the term, you know,
10:41:15	5	played Xbox games loosely, but you can see
10:41:18	6	in QA9, the QA9 question clearly says you
10:41:23	7	indicated that you own or played with a
10:41:28	8	Microsoft Xbox Console. So there's a QA8
10:41:32	9	question that asks them whether they play
10:41:36	10	on, own or play video games on the Xbox
10:41:40	11	Console, so we do ask those people.
10:41:42	12	Q. What question are you reading
10:41:45	13	where it asks about playing games on a
10:41:47	14	console?
10:41:48	15	A. I'm sorry. So let me repeat
10:41:49	16	that. Exhibit F1, let us look at QA8, we
10:41:59	17	ask "Please indicate which of the following
10:42:00	18	video game consoles you currently own."
10:42:04	19	Q. That doesn't say what video
10:42:07	20	games, whether you play Xbox games, does it?
10:42:09	21	A. That question doesn't. And
10:42:11	22	obviously the questions about, we also ask
10:42:18	23	people -- so it says whether they own it.
10:42:22	24	So people who owned it have made purchasing
10:42:25	25	decisions at some point or the other to

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10:42:28	1	purchase an Xbox Console. Some of them may
10:42:31	2	be -- may be knowledgeable enough to answer
10:42:35	3	the question related to the MBAFF or
10:42:39	4	interlaced and progressive and some of them
10:42:42	5	may not be. But the fact that they own it,
10:42:44	6	they are in a group of people that are
10:42:48	7	technically more, you know, can --
10:42:51	8	technically more knowledgeable, let me put
10:42:54	9	it this way. It's not an absolute -- there
10:42:56	10	are varying ranges of people who have
10:42:59	11	technology -- technically more knowledgeable
10:43:01	12	as well, and...
10:43:03	13	Q. What is the basis for your
10:43:08	14	statement that the group of individuals who
10:43:09	15	own video game consoles are technically more
10:43:13	16	knowledgeable than others?
10:43:15	17	A. I think I want to go back to my
10:43:18	18	statement and make sure that I'm phrasing
10:43:20	19	this correctly. I never said that they are
10:43:22	20	all. If you -- if there was a scale to
10:43:25	21	check on someone in terms of how
10:43:27	22	knowledgeable they're technical --
10:43:30	23	technically, you would expect that this
10:43:32	24	group would be more knowledgeable than those
10:43:35	25	who are not. So -- and even amongst them

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10:43:41	1	there are those who probably are just users
10:43:46	2	and gamers and then there are those who know
10:43:50	3	more about what the game console is built
10:43:53	4	off and what it makes and what it means.
10:43:55	5	Q. I own an Xbox. I have never
10:44:02	6	used an Xbox. Am I correct that I would
10:44:05	7	have qualified both to be interviewed by Dr.
10:44:10	8	Pasternack and for the initial set of
10:44:14	9	interviews and for the pilot study?
10:44:23	10	A. Yes.
10:44:23	11	Q. Do you have any data or evidence
10:44:25	12	that I am technically more knowledgeable
10:44:28	13	than the typical consumer about video
10:44:34	14	content or downloading video content?
10:44:43	15	A. I don't, and it does not affect
10:44:45	16	my results in any way.
10:45:00	17	MS. THAYER: Let's mark as the
10:45:01	18	next exhibit, 343, a letter dated
10:45:03	19	August 21, 2012, to me, from Mr. Shown
10:45:06	20	hard.
10:45:07	21	(PX Exhibit 343 for
10:45:07	22	identification, letter dated August
10:45:07	23	21, 2012, to Ms. Thayer from Mr.
10:45:23	24	Schoenhard.)
10:45:23	25	Q. Have you seen this document

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10:45:24	1	before?
10:45:42	2	A. No, I have not seen this
10:45:43	3	document before.
10:45:44	4	Q. Do you know whether -- strike
10:45:56	5	that.
10:45:57	6	Are you familiar with the files
10:45:58	7	that are listed in this document?
10:46:03	8	A. I'm familiar with the files that
10:46:15	9	are listed on this document.
10:46:16	10	Q. Are these files that were
10:46:28	11	created during the research that you
10:46:36	12	supervised?
10:46:36	13	A. I would expect that these would
10:46:45	14	be files that would have been created during
10:46:48	15	the research that I supervised, yes.
10:46:52	16	Q. These weren't recreated after
10:46:56	17	you prepared your report, were they?
10:46:58	18	A. No, because some of these files
10:47:00	19	would have been used in the analysis of what
10:47:03	20	we -- we did. So someone could take the
10:47:08	21	.cho file and have gone through the same
10:47:10	22	analysis that I've done here and produced
10:47:12	23	the same results that I produced.
10:47:28	24	MS. THAYER: Let's mark as
10:47:29	25	Exhibit 344 a letter dated August 24,

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10:47:35	1	2012 to myself from Mr. Schoenhard.
10:47:38	2	(PX Exhibit 344 for
10:47:38	3	identification, letter dated August
10:47:38	4	24, 2012, to Ms. Thayer from Mr.
10:48:13	5	Schoenhard.)
10:48:13	6	Q. Are you familiar with this
10:48:14	7	document?
10:48:14	8	A. Yes, I've seen this document.
10:48:15	9	Q. There are files that are listed
10:48:19	10	on pages 1 and 2, do you see those?
10:48:23	11	A. Yes.
10:48:23	12	Q. Are you familiar with those
10:48:24	13	files?
10:48:25	14	A. Yes, I was asked to look at
10:48:27	15	these files, yes.
10:48:28	16	Q. Who asked you to look at these
10:48:31	17	files?
10:48:31	18	A. Counsel asked me to look at
10:48:33	19	these files, yes.
10:48:34	20	Q. Were these files that were
10:48:37	21	created as part of your research that's
10:48:39	22	reflected in your report?
10:48:40	23	A. Yes.
10:48:40	24	Q. Were they all created before the
10:48:43	25	report was prepared?

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10:48:45	1	A. They were all created before the
10:48:47	2	report was provided, yes.
10:48:48	3	Q. There in the right-hand column
10:48:52	4	there's some text. Did you provide that
10:48:56	5	text to counsel?
10:48:57	6	A. I verbally provided the text to
10:49:01	7	counsel.
10:49:02	8	Q. Where it says "not relevant,"
10:49:06	9	did you provide that information to counsel?
10:49:12	10	A. Yes.
10:49:12	11	Q. In what sense was the file
10:49:16	12	5007A_CBC.log not relevant in your view?
10:49:23	13	A. That file is an output from the
10:49:30	14	CBC/HB software, so it comes from the CBC/HB
10:49:37	15	software and it is not something that I
10:49:38	16	produce. It is what the software produces.
10:49:42	17	And it is in that context that I said it is
10:49:44	18	not relevant.
10:49:44	19	Q. Is this something you analyzed?
10:49:48	20	A. The .log file is not something
10:49:57	21	that I use in guiding my results and is not
10:49:59	22	required to guide my results in any fashion.
10:50:10	23	Can I request a break here?
10:50:14	24	MS. THAYER: Oh, of course.
10:50:16	25	THE VIDEOGRAPHER: One moment,

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10:50:17	1	please, watch your microphones. I'll
10:50:19	2	change tape at this time. Here now
10:50:20	3	marks the end of tape 2 of the
10:50:22	4	deposition of Dr. R. Sukumar. The
10:50:25	5	time is 10:50 a.m., we're now off the
10:50:28	6	record.
10:50:29	7	(A recess was taken.)
11:01:21	8	THE VIDEOGRAPHER: Here now
11:01:23	9	marks the beginning of tape 3 of the
11:01:25	10	deposition of Dr. R. Sukumar. The
11:01:28	11	time is 11:01 a.m., we're back on the
11:01:34	12	record.
11:01:34	13	Q. If I could ask you, please, to
11:01:37	14	look back at Exhibit 340, that is the
11:01:41	15	document we were looking at with respect to
11:01:43	16	the pilot testing. What use, if any, did
11:02:03	17	you make of the top five selections that are
11:02:10	18	indicated in these or other similar forms
11:02:13	19	that you received?
11:02:14	20	A. It confirmed for me that, you
11:02:22	21	know, some of the attributes, for example,
11:02:28	22	price, where we did not include all the
11:02:32	23	levels, it confirmed that for me. And
11:02:36	24	optical audio port, for example, is not all
11:02:40	25	that important, so. It made the exercise

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11:02:48	1	focus on things that really mattered and how
11:02:52	2	they made those -- those purchase decisions.
11:02:55	3	Q. Did the answers to these
11:02:57	4	questions affect the, or alter any of the
11:03:10	5	choices that were ultimately presented to
11:03:13	6	respondents in the final survey?
11:03:15	7	A. In the discrete choice exercise,
11:03:21	8	the CBC choice based conjoint exercise, the
11:03:25	9	attributes that we included in there were
11:03:27	10	reflective of the ones that people said they
11:03:30	11	would use more often. So and we -- it
11:03:36	12	helped confirm that exercise. It does not
11:03:39	13	affect the results because when they make
11:03:42	14	the tradeoff exercise it's assuming all else
11:03:46	15	that is not shown there to be held constant.
11:03:49	16	So therefore, you know, something like an
11:03:51	17	optical audio port is assumed to be constant
11:03:56	18	when they make those tradeoffs. It only
11:03:58	19	focuses on things that mattered to them.
11:04:00	20	Q. But just so I'm clear, the two
11:04:04	21	surveys that we have as Exhibit F1 and F2
11:04:07	22	have a number of pages where the respondent
11:04:14	23	selects one of three possible Xbox
11:04:20	24	configurations, right?
11:04:20	25	A. Mm-hmm.

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11:04:23	1	THE REPORTER: Yes?
11:04:23	2	A. Yes.
11:04:24	3	Q. Thank you, we just always need
11:04:29	4	to have an audible answer for our court
11:04:31	5	reporter.
11:04:33	6	Am I correct that the attributes
11:04:40	7	contained on each of those pages did not
11:04:43	8	change between the pilot study and the final
11:04:48	9	survey?
11:04:49	10	A. That's correct.
11:04:49	11	Q. What was the source of the
11:05:03	12	attributes that are listed on the second
11:05:05	13	page of Exhibit 340?
11:05:07	14	A. The source was the initial
11:05:14	15	conversations that were there, plus a review
11:05:19	16	of various websites like bestbuy.com, to see
11:05:28	17	various Xbox 360s and what are described or
11:05:32	18	not described over there. So it was
11:05:35	19	designed based on -- and then it was
11:05:37	20	fine-tuned based on those initial
11:05:40	21	conversations.
11:06:05	22	MS. THAYER: Let's mark as
11:06:06	23	Exhibit 345 errata to July 24th expert
11:06:14	24	report of Dr. R. Sukumar.
11:06:15	25	(PX Exhibit 345 for

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11:06:15	1	identification, errata to July 24th
11:06:36	2	expert report of Dr. R. Sukumar.)
11:06:36	3	Q. Dr. Sukumar, are you familiar
11:06:37	4	with this exhibit?
11:06:39	5	A. Yes, I am.
11:06:40	6	Q. When in paragraph 2 -- strike
11:06:45	7	that.
11:06:46	8	In paragraph 2 you refer to a
11:06:48	9	discovery about an inadvertent clerical
11:06:50	10	error. Do you see that?
11:06:51	11	A. Yes.
11:06:53	12	Q. When did you discover the error?
11:06:59	13	A. I discovered that error when I
11:07:02	14	was reviewing my report in preparation for
11:07:08	15	this deposition.
11:07:09	16	Q. Can you give me a day?
11:07:20	17	A. Oh, I want to say approximately
11:07:23	18	sometime last week, middle of last week.
11:07:27	19	Q. What exactly were you looking at
11:07:29	20	when you discovered the error?
11:07:30	21	A. Well I was just -- I was reading
11:07:33	22	through the table and looked at the
11:07:39	23	computation of these numbers and noticed
11:07:42	24	that there was the, you know, two cells were
11:07:48	25	wrongly added and it might have been a

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11:07:53	1	mistake in the way the cursor was placed in
11:07:56	2	defining these cells, and I reported that
11:08:00	3	immediately to counsel.
11:08:02	4	Q. Can you turn in Exhibit 338 to
11:08:09	5	table 9.
11:08:19	6	A. Yes.
11:08:19	7	Q. Sorry, 338 is the original
11:08:21	8	report. At the next break I'll try and get
11:08:29	9	you a clip that we can put on the side so
11:08:31	10	that's easier to manage.
11:08:40	11	What is it about table 9 that
11:08:44	12	you saw when preparing for your deposition
11:08:48	13	that suggested that there was an inadvertent
11:08:50	14	clerical error?
11:08:51	15	A. Well, I looked at the word
11:08:56	16	progressive, I was looking at the
11:09:00	17	questionnaire, and I noticed that we had
11:09:01	18	both interlaced and progressive and I had
11:09:04	19	not reported interlaced. So I went back to
11:09:06	20	the spreadsheet to see what was the
11:09:09	21	percentage of interlaced and that's when I
11:09:15	22	identified the error.
11:09:17	23	Q. What spreadsheet did you look at
11:09:24	24	that suggested to you that there was an
11:09:25	25	error with respect to the progressive

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11:09:28	1	calculation?
11:09:33	2	MS. HOANG: Objection; form;
11:09:35	3	misstates evidence.
11:09:36	4	A. The spreadsheet with all of the
11:09:39	5	data that, I've got to remember exactly what
11:09:45	6	that file is, but that was given.
11:09:51	7	Q. It was given to whom?
11:09:52	8	A. It was given as part of the
11:09:54	9	report initially with all the native format
11:09:58	10	of the data.
11:09:59	11	Q. Do you have any idea of what the
11:10:00	12	name of the file is that I could consult to
11:10:05	13	determine that the original table line
11:10:08	14	figure for progressive percentage is
11:10:11	15	incorrect?
11:10:12	16	A. I don't recall the file name,
11:10:14	17	but I can find out and let you know.
11:10:17	18	Q. Is it mentioned in any of the
11:10:18	19	letters that we've been going through here?
11:10:20	20	A. I'm sure it is mentioned, but I
11:10:24	21	need to go back and look at and identify
11:10:26	22	specifically which one.
11:10:26	23	Q. Well, does this spreadsheet --
11:10:31	24	A. I said this is raw data. Sorry,
11:10:33	25	go ahead.

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11:10:35	1	Q. Does the spreadsheet contain the
11:10:39	2	numbers 30.3 percent and 33.3 percent or
11:10:44	3	does it contain some other sort of data that
11:10:46	4	then gets manipulated to calculate those
11:10:49	5	percentages?
11:10:50	6	A. It contains the individual
11:10:59	7	respondent's answers which when counted will
11:11:01	8	give you the 30.3 or the 33.3.
11:11:14	9	Q. So how did the mistake occur
11:11:16	10	that generated the incorrect number,
11:11:18	11	percentage for not sure and progressive in
11:11:21	12	the original table 9? How did that occur?
11:11:29	13	A. As I said, the way, the word
11:11:32	14	progressive was asked in two questions, so
11:11:34	15	it was the summation of both of those, so
11:11:40	16	when counting it, the counting would have
11:11:42	17	been done, and I don't recall exactly, as I
11:11:44	18	said, when I checked back, I noticed that
11:11:46	19	interlaced -- when I started to look at my
11:11:49	20	report I noticed that interlaced was not
11:11:51	21	there. I went back to getting the results
11:11:53	22	for interlaced should I be asked today about
11:11:55	23	what those numbers were, and I did a count
11:11:58	24	in the spreadsheet, that's when I found that
11:12:00	25	the progressive number was incorrect and it

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11:12:06	1	actually accounted for the progressive in
11:12:11	2	both questions.
11:12:14	3	Q. When you say both questions,
11:12:16	4	what are you referring to?
11:12:17	5	A. There's progressive in QH5A1 and
11:12:20	6	also in QH5A2.
11:12:33	7	Q. So are you saying it was
11:12:34	8	incorrectly, those two questions were
11:12:36	9	incorrectly added previously where they
11:12:38	10	should not have been added?
11:12:39	11	A. Something -- that's correct.
11:12:40	12	Something of that sort. When doing that
11:12:41	13	analysis that error happened. When doing
11:12:45	14	the count, the summation led to the
11:12:48	15	progressive number being at 54 percent when
11:12:51	16	the progressive number should have only been
11:12:54	17	33.3 percent for QH5A1.
11:12:57	18	Q. What led to the error in the not
11:13:00	19	sure row?
11:13:01	20	A. I think it was a similar, not
11:13:06	21	sure from QH5A1 and not sure from QH5A2.
11:13:13	22	It's a counting error that happened out
11:13:15	23	there.
11:13:24	24	Q. Thank you, I'm done with that
11:13:44	25	one for now.

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11:13:45	1	If you'll look at Exhibit 342,
11:13:47	2	which is the August 7 letter to myself from
11:13:50	3	Mr. Schoenhard.
11:13:54	4	A. Give me one second, please.
11:14:13	5	Q. If you look at the second page,
11:14:14	6	there's an item 18.
11:14:17	7	A. Are we looking at the same?
11:14:19	8	Q. August 7.
11:14:20	9	A. I'm sorry, 342, okay.
11:14:28	10	Q. The last bullet.
11:14:30	11	A. Yes.
11:14:30	12	Q. This states that confidence
11:14:35	13	interval estimates were calculated as
11:14:38	14	documented in a book. Do you see that?
11:14:41	15	A. Yes.
11:14:41	16	Q. I have that textbook here today.
11:14:48	17	Did you rely on this textbook as the basis
11:14:53	18	for calculating confidence interval
11:14:57	19	estimates?
11:14:57	20	A. So that -- I relied on this
11:15:02	21	book. In general all statistics, anybody
11:15:07	22	who does a Ph.D. goes through that book and
11:15:09	23	we have used this book extensively. The
11:15:13	24	formulas used, for example, in defining what
11:15:16	25	the confidence interval range would be to

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11:15:20	1	expect on any question that is in my report
11:15:23	2	are standard calculations that are available
11:15:25	3	in that book.
11:15:28	4	Q. Could you please point out to me
11:15:29	5	what you relied on in this textbook as a
11:15:32	6	basis for calculating confidence intervals
11:15:35	7	as set forth in your report.
11:15:39	8	A. Okay. This is going to take
11:15:48	9	some time, you know, because I was being --
11:16:50	10	okay, so one example is equation 16 on page
11:16:57	11	394 or equation 3 -- equation 17 on page
11:17:07	12	395.
11:17:09	13	MS. THAYER: Just so the record
11:17:10	14	is clear, and counsel, if it's okay
11:17:12	15	with you, I'll make a copy of these
11:17:14	16	pages just so we have a record to
11:17:15	17	attach to the deposition, but I don't
11:17:17	18	want to -- until we get done with the
11:17:19	19	book I didn't want to copy the whole
11:17:21	20	thing.
11:17:22	21	MS. HOANG: That's fine. If you
11:17:24	22	could also copy the copyright page.
11:17:27	23	MS. THAYER: Of course, of
11:17:28	24	course.
11:17:28	25	Q. So to be clear, are you saying

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11:17:29	1	those two equations were equations that you
11:17:32	2	employed in computing the lower and upper
11:17:36	3	confidence levels that are in tables 11 and
11:17:40	4	15 of your report?
11:17:41	5	A. Sorry, in my report, to be again
11:17:46	6	precise about it, my report I state a broad
11:17:48	7	range of confidence intervals that can be
11:17:52	8	expected given the sample sizes that we
11:17:55	9	have. They take into account the largest
11:17:57	10	possible confidence interval that you can
11:17:59	11	expect and they're stated in the report.
11:18:02	12	And the computations of those
11:18:05	13	would involve these equations that I just
11:18:08	14	mentioned.
11:18:08	15	Q. All right. Let me then just
11:18:13	16	make sure I'm clear about your answer before
11:18:16	17	we go on with that book. Could you turn to
11:18:18	18	your report, the original report, the page
11:18:28	19	7, paragraph 1.
11:18:32	20	A. Give me one second.
11:18:34	21	Q. Yes, I'm sorry, there are lots
11:18:36	22	of exhibits.
11:18:36	23	A. I just want to make sure I'm
11:18:38	24	not -- right.
11:18:55	25	Q. So there's a statement in

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11:18:57	1	paragraph 1 about statistical confidence
11:19:00	2	intervals can be expected to be within a
11:19:01	3	range, do you see that?
11:19:02	4	A. That's correct.
11:19:03	5	Q. Is that the comment that you
11:19:04	6	were just referring to when you said that
11:19:09	7	you can utilize equation 16 and 17 to
11:19:13	8	calculate a confidence interval for a sample
11:19:17	9	of this size?
11:19:18	10	A. That's correct. And
11:19:22	11	additionally, there's another place where we
11:19:23	12	mention confidence intervals, which is
11:19:25	13	around the willingness to pay, and this book
11:19:29	14	again is the basis of for developing the
11:19:33	15	confidence intervals for that statistic as
11:19:36	16	well.
11:19:36	17	Q. For example, table 11 on page
11:19:42	18	11, what did you use from that book to
11:19:46	19	calculate the lower and upper confidence
11:19:50	20	levels reflected in that table?
11:19:52	21	A. Let me tell you. Again, these
11:20:02	22	are complicated formulas, so it's one of
11:20:04	23	those that the exact page numbers, I mean I
11:20:12	24	don't remember from the top of my head, but
11:20:14	25	I'm --

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11:20:18	1	MS. HOANG: Take the time you
11:20:19	2	need.
11:20:19	3	A. So I may need some time here to
11:20:21	4	make sure that I pulled the right --
11:20:23	5	Q. That's fine.
11:22:13	6	A. So what I'm specifically looking
11:22:14	7	for, just so you know so I'm not just
11:22:17	8	randomly turning pages, and I don't know
11:22:18	9	what edition of the book this might be, I'm
11:22:23	10	specifically looking for confidence
11:22:27	11	intervals for random variables that are
11:22:32	12	ratios and how to do it is described in this
11:22:37	13	book if I'm not -- so pages 180 and 181, it
11:23:34	14	says product and quotient of random
11:23:38	15	variables, those are relevant pages from
11:23:44	16	which the formula used to compute the
11:23:46	17	confidence interval estimates for the table
11:23:59	18	11.
11:24:01	19	Q. May I see that briefly? I'll
11:24:04	20	give it right back to you.
11:24:05	21	A. Sure.
11:24:23	22	MS. THAYER: Just for the
11:24:24	23	record, this is the third edition,
11:24:26	24	"Introduction to the theory of
11:24:28	25	statistics."

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11:24:29	1	Q. On the two pages that you've
11:24:30	2	just directed me to, there are two theorems.
11:24:35	3	Could you clarify whether you used one or
11:24:37	4	the other or both in calculating the
11:24:41	5	confidence level, lower and upper confidence
11:24:45	6	levels in table 11?
11:24:58	7	A. I can only say it would be
11:25:03	8	theorem 4.
11:25:06	9	Q. Is your conjoint analysis here
11:25:11	10	based on Bayesian statistics?
11:25:15	11	A. I'm not sure. I'd say it's
11:25:21	12	based on a hierarchical Bayesian approach to
11:25:25	13	analyze, to develop the estimates for the
11:25:31	14	part worth utilities.
11:25:34	15	Q. What is Bayesian statistics?
11:25:38	16	A. So just to -- this is a question
11:25:46	17	that is like very detailed, so I'm going to
11:25:50	18	take some time to answer this question.
11:25:56	19	Bayesian, Bayesian approach in
11:25:59	20	general is what is referred to as a
11:26:05	21	nonparametric approach, which means that a
11:26:09	22	Bayesian begins with a prior distribution, a
11:26:15	23	prior probability distribution and based on
11:26:20	24	additional data, updates that prior
11:26:25	25	distribution using what is called as the

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11:26:31	1	Bayes theorem.
11:26:32	2	Again, so the Bayes approach is
11:26:37	3	used by the CBC/HB software to come up with
11:26:48	4	how much -- what is referred to as a part
11:26:53	5	worth utilities, to come up with the part
11:26:56	6	worth utilities.
11:26:58	7	MS. HOANG: You want to spell
11:26:58	8	that for her.
11:26:59	9	A. It's part, p-a, like partial,
11:27:03	10	part, p-a-r-t, worth, w-o-r-t-h, part worth
11:27:07	11	and utilities. You know, so to come up with
11:27:10	12	the part worth utilities.
11:27:13	13	So once again, the traditional
11:27:15	14	statistical approach allows to take the
11:27:17	15	entire 499 respondents, or 561 respondents
11:27:23	16	and estimate a prior probability, and using
11:27:28	17	those prior probabilities and the data that
11:27:31	18	we have from each respondent, updates those
11:27:35	19	prior probabilities through an iterative
11:27:39	20	process to come up with the part worth
11:27:44	21	utilities.
11:27:48	22	And that's what, you know, it
11:27:49	23	follows Bayes theorem, so Bayesian analysis
11:27:54	24	follows Bayes theorem. Here we use the
11:27:57	25	hierarchical Bayesian approach, which is a

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11:27:59	1	two-step approach.
11:28:00	2	Q. How do Bayesian statisticians
11:28:03	3	typically account for uncertainty in their
11:28:05	4	calculations?
11:28:08	5	A. The -- it is based on the
11:28:17	6	sampling from a probability distribution
11:28:20	7	whose parameters are defined by a model that
11:28:25	8	is first estimated for all of the
11:28:28	9	respondents.
11:28:31	10	Q. Is that the same thing as a
11:28:33	11	confidence interval?
11:28:34	12	A. No, it is not the same thing as
11:28:36	13	a confidence interval.
11:28:37	14	Q. So how is it that in your report
11:28:43	15	you give confidence intervals for the
11:28:52	16	weighted MVI -- MVAI, sorry?
11:28:55	17	A. So the weighted MVAI is based on
11:29:00	18	the part worth utilities. So now the part
11:29:03	19	worth utilities that came from the CBC/HB
11:29:09	20	software, these utilities are being used to
11:29:13	21	compute the MVAI. So they're really looking
11:29:18	22	at this data to compute the ratio of two
11:29:23	23	numbers and one is looking at the ratio of
11:29:27	24	those two numbers being representative, is a
11:29:33	25	summary statistic.

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11:29:34	1	So going back to what I showed
11:29:36	2	you on page 181, you're looking at the
11:29:40	3	quotient of two random variables, X divided
11:29:44	4	by Y, quotient of two random variables, and
11:29:48	5	that random variable is now, you're
11:29:53	6	obtaining the confidence interval for that
11:29:57	7	with the appropriate distributions
11:30:00	8	associated with the new random variable
11:30:04	9	which is the quotient of those two random --
11:30:07	10	of those two values.
11:30:08	11	It has got nothing to do with
11:30:10	12	the Bayesian analysis, because the Bayesian
11:30:12	13	analysis provided us with the part worth
11:30:16	14	utilities and it is the part worth utilities
11:30:18	15	that are now being used to compute the
11:30:21	16	confidence intervals.
11:30:23	17	Q. Is the theorem 4 that you just
11:30:26	18	pointed out for us called a large sample
11:30:29	19	method?
11:30:31	20	A. The theorem 4 is reflective of
11:30:36	21	finding the distribution of ratios of random
11:30:40	22	variables for large samples.
11:30:46	23	Q. Would you agree that it is not
11:30:48	24	an exact formula for any given sample size?
11:30:52	25	A. It is not an exact for any given

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11:30:57	1	sample size, but it does take into account,
11:31:00	2	the formula itself takes into account the
11:31:03	3	sample size that is used.
11:31:06	4	Q. Have you ever heard of a
11:31:09	5	Bayesian credibility region?
11:31:13	6	A. The term credibility region is
11:31:15	7	used for confidence intervals for what are
11:31:23	8	strictly Bayesian analyses.
11:31:44	9	MS. THAYER: Let's mark as our
11:31:46	10	next two exhibits, so we're up to 346
11:32:04	11	and 347. Let me read into the record
11:32:05	12	what they are and then I'll give them
11:32:07	13	to you. So we'll call 346 is a
11:32:11	14	spreadsheet that I represent, and you
11:32:16	15	can confirm at the break if you like,
11:32:17	16	was produced as a PDF with Bates
11:32:20	17	number MOTM-WASH1823_0603538.
11:32:30	18	And Exhibit 347 was produced
11:32:34	19	with the Bates number ending 0603547.
11:32:39	20	Let me make sure I give these to
11:32:44	21	you in the right order.
11:32:45	22	(PX Exhibit 346 for
11:32:45	23	identification, Bates stamped
11:32:46	24	MOTM-WASH1823_0603538.)
11:32:46	25	(PX Exhibit 347 for

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11:32:46	1	identification, Bates stamped
11:33:15	2	MOTM-WASH1823_0603547.)
11:33:15	3	Q. Dr. Sukumar, does Exhibit 346
11:33:28	4	pertain to the 802.11 survey and does
11:33:33	5	Exhibit 347 pertain to the H.264 survey?
11:33:37	6	A. So I want to be careful here
11:34:05	7	since I don't have the files in front of me,
11:34:07	8	I don't know what file names they came from
11:34:14	9	and I would take your word if you said one
11:34:17	10	-- the first, 346 is for 802.11 and 347 was
11:34:21	11	for H.264, I would take your word for that.
11:34:33	12	Q. Well, we'll leave that aside for
11:34:37	13	right now, maybe we can run that down with
11:34:38	14	another file.
11:34:41	15	Do you know in this file what
11:34:43	16	the column that's entitled sys_ElapsedTime
11:34:50	17	represents?
11:34:58	18	A. It represents the amount of time
11:35:01	19	taken by the respondent to complete the
11:35:08	20	conjoint exercise, and I'm not sure from the
11:35:11	21	top of my head as to how that is represented
11:35:13	22	in terms of seconds, milliseconds, I'm not
11:35:17	23	sure, or minutes, I'm not sure exactly --
11:35:17	24	Q. Do you --
11:35:21	25	A. -- what the unit of measurement

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11:35:22	1	is.
11:35:23	2	Q. Forgive me for talking over you,
11:35:26	3	I try not to do that.
11:35:28	4	Do you know when the clock
11:35:30	5	starts for purposes of this data? In other
11:35:33	6	words, if we look at your report, does it
11:35:40	7	start when the user types in the code, when
11:35:47	8	the user agrees to the confidentiality
11:35:50	9	agreement, or does it start when -- after
11:35:55	10	all the screening has taken place? Do you
11:35:58	11	have any information on that?
11:35:59	12	A. I don't have direct information
11:36:02	13	here, but some of this would have been in
11:36:07	14	the CBC manual would discuss at what point
11:36:11	15	they start the clock.
11:36:12	16	Q. What CBC manual are you
11:36:15	17	referring to?
11:36:15	18	A. It's a Choice Based Conjoint
11:36:22	19	manual that Sawtooth Software produces.
11:36:33	20	Q. So this is not something that
11:36:38	21	you specifically had requested to be
11:36:43	22	measured in this study, but rather it's
11:36:45	23	something the software typically does?
11:36:47	24	A. The software typically does
11:36:49	25	this. It's a system that produces this.

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11:36:51	1	Q. If I wanted to find this manual,
11:36:54	2	do you know what edition or what year would
11:36:58	3	be applicable to your --
11:36:58	4	A. The latest --
11:37:01	5	Q. -- survey?
11:37:02	6	A. The latest -- sorry, I didn't
11:37:04	7	mean to speak over you. The latest edition.
11:37:22	8	Q. Now you mentioned that the
11:37:23	9	software is used to calculate part worths;
11:37:27	10	is that right?
11:37:28	11	A. So can we clarify which software
11:37:30	12	we're talking about?
11:37:31	13	Q. The Sawtooth software.
11:37:33	14	A. So Sawtooth Software is the name
11:37:35	15	of the company. They produce, they have
11:37:40	16	developed and offer multiple software. The
11:37:44	17	software that is called CBC, Choice Based
11:37:51	18	Conjoint, is used for collecting the data.
11:37:54	19	And earlier on today I mentioned
11:37:56	20	CBC/HB and that software is used to compute
11:38:05	21	the part worth utilities.
11:38:11	22	Q. What are, and if you need to
11:38:18	23	look back to any of -- we can put these
11:38:22	24	aside for right now. If you need to look
11:38:25	25	back to any of the files listed in the

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11:38:26	1	letters that we marked earlier, can you
11:38:29	2	identify for me from those letters the files
11:38:32	3	that are the input files to the CBC/HB
11:38:40	4	software?
11:38:59	5	A. So there's different versions of
11:39:03	6	files that can be submitted, or different
11:39:06	7	formats. The formats that we submitted were
11:39:09	8	the .att and the .cho files. So if you look
11:39:15	9	at exhibit, this is PX 343, that's a letter
11:39:19	10	to you, you see the file that says
11:39:25	11	5007H_CBC.att, 5007H_CBC.cho. And then the
11:39:34	12	second for the H.264. SO the first one is
11:39:38	13	for H.264, the other one is for 802.11.
11:39:43	14	Q. Thank you. Could you also
11:39:44	15	identify the output files from that
11:39:47	16	software, the CBC/HB? I think you may have
11:39:50	17	already done this, but I just want to make
11:39:52	18	sure that I'm clear.
11:40:29	19	MS. HOANG: Sorry, could you
11:40:30	20	read back the question for me.
11:40:31	21	(Record read as requested.)
11:40:32	22	A. So there's, I'm looking at
11:40:36	23	Exhibit 344. In the manual for the CBC/HB
11:40:46	24	software it details the different output
11:40:50	25	files. For example, I'm going to take an

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11:40:53	1	example or two but I will not go through
11:40:55	2	every one of them. The 5007A_CBC.log,
11:41:03	3	_CBC.restart, _sttdev.csv. These are
11:41:11	4	examples of files that come out off the
11:41:17	5	CBC/HB software. Another example is right
11:41:20	6	here, CBC_utilities.csv. These are examples
11:41:25	7	of those output files.
11:41:30	8	MS. THAYER: Then let's mark as
11:41:31	9	Exhibit 348 a document that is not
11:41:33	10	Bates labeled, but it's 38 pages long
11:41:39	11	-- it is. I'm sorry, it's
11:41:43	12	MOTM-WASH1823_0606223.log. This is
11:41:53	13	348.
11:41:53	14	(PX Exhibit 348 for
11:41:53	15	identification, Bates stamped
11:42:11	16	MOTM-WASH 1823_0606223.log.)
11:42:11	17	Q. Am I correct that this document
11:42:14	18	pertains to the H.264 survey?
11:42:17	19	A. Well looking at the file name
11:42:26	20	here, yes, it does pertain to the H.264
11:42:34	21	survey.
11:42:34	22	Q. On the first page it has a
11:42:37	23	little chart that says attribute coding
11:42:39	24	levels. Do you see that?
11:42:40	25	A. Yes.

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11:42:40	1	Q. What does the column levels
11:42:44	2	mean?
11:42:44	3	A. It indicates how many levels
11:42:48	4	were there for each of those attributes.
11:42:51	5	Q. How did you determine the number
11:42:53	6	of levels to use for any given attribute?
11:42:58	7	A. So we have to, to go back to
11:43:07	8	looking, you know, talking about how we came
11:43:09	9	up with the attributes and levels, which is
11:43:13	10	based on the initial interviews, look at
11:43:21	11	what's available across a couple of
11:43:23	12	retailers online. That's what is used to
11:43:27	13	define each attribute. The pilot tests were
11:43:31	14	done to confirm those, the attributes and
11:43:33	15	the levels. That was programmed in the
11:43:37	16	survey.
11:43:38	17	And what you're seeing out here
11:43:40	18	is based on the analysis of that .cho file
11:43:45	19	that we talked in our previous question and
11:43:48	20	these levels here are essentially coming
11:43:50	21	right out of that.
11:43:53	22	Q. Could you look at Exhibit 340,
11:43:55	23	which is the pilot test document that we've
11:43:58	24	consulted several times. Do you see number
11:44:21	25	1, Wi-Fi?

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11:44:22	1	A. Right.
11:44:23	2	Q. For purposes of Exhibit 348,
11:44:29	3	down at the bottom of the page it talks
11:44:31	4	about attribute 1, 2, 3, 4, that sort of
11:44:34	5	thing. Am I correct that attribute 1
11:44:37	6	corresponds with Wi-Fi, or is that not
11:44:39	7	necessarily the case?
11:44:41	8	A. Yes.
11:44:52	9	Q. Okay. So if I look at Exhibit
11:44:58	10	340, I see that there are three levels for
11:45:02	11	Wi-Fi. But when I look at 348 I see the
11:45:06	12	number 4. Can you explain to me that
11:45:12	13	difference?
11:45:12	14	A. Sure. So when you looked -- you
11:45:17	15	know, and again this is, what this is doing
11:45:23	16	is that Wi-Fi presence or absence, is
11:45:26	17	attribute 14, capability to accept Wi-Fi
11:45:29	18	adapter, yes or no. We took that attribute
11:45:33	19	and felt, and essentially combined that with
11:45:37	20	the Wi-Fi attribute in the actual pilot
11:45:40	21	tests that were done.
11:45:41	22	And when we combined that it
11:45:47	23	effectively became four levels and that's
11:45:50	24	why you're seeing that as four levels now.
11:45:52	25	Q. So what was the fourth level?

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11:45:54	1	A. The fourth -- so the fourth --
11:46:02	2	the -- there was no built-in Wi-Fi. Then
11:46:06	3	was the presence of the adapter, the Wi-Fi
11:46:11	4	capability except Wi-Fi adapter would be the
11:46:14	5	second level, and then after that was
11:46:16	6	built-in comparable with B/G networks and
11:46:19	7	built-in comparable with B/G/N networks.
11:46:24	8	So the levels here were, were --
11:46:26	9	that were used, I mean this sheet of paper,
11:46:29	10	again, as I said, I did not see this. This
11:46:33	11	is largely a pilot test. What was designed
11:46:36	12	in the actual survey itself that was pilot
11:46:38	13	tested included the levels like the way we
11:46:40	14	just described it.
11:46:41	15	Q. So those levels did not change
11:46:44	16	between the pilot test and the final survey?
11:46:46	17	A. That's right. And it does not
11:46:54	18	affect my results in any fashion. What
11:46:57	19	we're doing out here is in the pilot test
11:47:00	20	we're looking at do people understand these
11:47:02	21	attributes and levels, and in the final
11:47:05	22	survey, in terms of these different
11:47:07	23	attributes, we recognize that Wi-Fi and the
11:47:12	24	ability to accept Wi-Fi adapter are all
11:47:14	25	within the same attribute and we combine

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11:47:16	1	that into four levels.
11:47:23	2	Q. Turning back to Exhibit 348.
11:47:28	3	There is a statement under the chart we were
11:47:30	4	looking at, "Numbers of parameters to be
11:47:33	5	estimated."
11:47:34	6	Do you see that?
11:47:35	7	A. That's correct.
11:47:38	8	Q. What is that phrase referring
11:47:40	9	to?
11:47:40	10	A. So that's saying if you look at
11:47:45	11	these different attributes and levels, it's
11:47:48	12	taking one less than the number of levels
11:47:56	13	and the summation of that is equal to 20.
11:47:58	14	So it's actually a summation of that would
11:48:00	15	be 19 if you include none. The system is
11:48:02	16	telling you that it had to estimate 20
11:48:07	17	variables in there, 20 parameters. Remember
11:48:10	18	we said part worth utilities, so it has to
11:48:13	19	estimate 20 part worth utilities as part of
11:48:16	20	this process.
11:48:16	21	Q. What does it mean that the
11:48:18	22	number of constraints to be used is 19?
11:48:20	23	A. Right, so as part of doing the
11:48:24	24	CBC software runs, there are some
11:48:29	25	constraints that, these are meant to be more

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11:48:34	1	logical constraints. Because the Bayesian
11:48:37	2	approach is doing it as an iterative task,
11:48:41	3	these constraints are largely one of logic,
11:48:44	4	meaning that you want to make sure that the
11:48:50	5	utility for a higher price, the part worth
11:48:56	6	utility for a higher price, so take $499 and
11:49:00	7	you're looking at the part worth utility for
11:49:02	8	that, that utility ought to be lower than
11:49:06	9	the part worth utility for $399.
11:49:10	10	So as a logical sequence,
11:49:14	11	consumers would want to have -- and again,
11:49:17	12	it doesn't say that -- it's a constraint
11:49:23	13	that hierarchical Bayesian, the Bayesian
11:49:25	14	approach uses, but it does not restrict it
11:49:29	15	from the point of view of what the results
11:49:32	16	turn out to be. It is using those in terms
11:49:34	17	of just a repeated sampling and the
11:49:36	18	iterative process -- am I going too fast --
11:49:39	19	iterative process that it uses, it is using
11:49:42	20	it from that. It's simply a logical
11:49:46	21	constraint.
11:49:47	22	Q. What constraint did you impose
11:49:48	23	on the Wi-Fi attribute, or constraints?
11:50:06	24	A. The constraints are given right
11:50:08	25	here at the bottom of this page, Exhibit

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11:50:10	1	348, at the bottom of page 1, and you can
11:50:13	2	see what those constraints are. So it's
11:50:16	3	essentially saying level 1 of attribute 1
11:50:19	4	should be, should have a utility that is
11:50:22	5	greater than level 2. Level 2 should be
11:50:25	6	greater than level 3. Again, these are
11:50:27	7	standard logical constraints.
11:50:31	8	And with regards to price, you
11:50:32	9	can see there level 2 is greater than level
11:50:36	10	1, which means the lower the price, the
11:50:38	11	higher the utility, and these are just
11:50:40	12	simply logical system constraints that have
11:50:43	13	got -- that apply to the Bayesian process.
11:50:47	14	And these are very standard approaches that
11:50:52	15	are done.
11:50:52	16	Q. Am I correct then that you
11:50:56	17	imposed this constraint with respect to
11:51:00	18	Wi-Fi that would not permit a respondent to
11:51:04	19	be indifferent as to whether or not Wi-Fi
11:51:06	20	was present?
11:51:07	21	A. So when the respondent makes
11:51:11	22	choices, that respondent could have chosen
11:51:14	23	consistently not to choose a product with
11:51:19	24	Wi-Fi and chosen some other product at a
11:51:24	25	lower price, or it could have said I don't

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11:51:26	1	want to have Wi-Fi at all because I don't
11:51:28	2	need it. That choice could have been done.
11:51:32	3	This is simply a logical thing
11:51:35	4	from the mathematical perspective, it's a
11:51:37	5	logical sequence, so it's got nothing to do
11:51:40	6	with how people really made choices.
11:51:42	7	Q. But if somebody consistently
11:51:46	8	selected a choice that didn't involve Wi-Fi,
11:51:51	9	wouldn't this constraint mean that
11:51:55	10	nonetheless that respondent is treated as
11:52:00	11	having greater than zero value for that
11:52:05	12	attribute?
11:52:07	13	A. It would say -- so again, this
11:52:12	14	is an iterative process, it's sampling
11:52:15	15	through that whole distribution. It only
11:52:18	16	says that, logically speaking, you don't
11:52:21	17	want to have something with more features
11:52:25	18	available to have a value less than the one
11:52:28	19	which has less features available to it.
11:52:30	20	You could, in my experience, and
11:52:36	21	you could do this without the constraints,
11:52:39	22	and the results, generally speaking, turn
11:52:41	23	out to be very similar. What it is doing is
11:52:47	24	removing illogical constraints, illogical
11:52:51	25	utilities. It is not taking out illogical

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11:52:54	1	-- I mean it's not taking out responses.
11:52:57	2	The measurement is still the same. It is
11:53:00	3	just taking out the possibility of illogical
11:53:03	4	answers that might arise, such as I
11:53:07	5	under-value money, I under-value higher
11:53:11	6	priced, you know, I give a higher utility to
11:53:15	7	a higher price than I give to a lower price.
11:53:29	8	Q. Why would it be illogical for
11:53:43	9	someone to prefer built-in Wi-Fi compatible
11:53:49	10	with B/G networks to built-in Wi-Fi
11:53:53	11	compatible with N networks? Why is that
11:53:57	12	illogical?
11:53:59	13	MS. HOANG: Objection; form;
11:54:01	14	assumes facts not in evidence.
11:54:02	15	A. Again, this is -- you know, data
11:54:08	16	and mathematics and statistics are such that
11:54:14	17	of -- and computers, because this is a
11:54:15	18	computer-driven process, can yield answers
11:54:20	19	that don't make any sense. And what you're
11:54:25	20	doing out here is strictly one that is
11:54:31	21	suggesting, and there are instances where
11:54:33	22	even the constraints may be violated, but
11:54:37	23	one is suggesting that the estimation
11:54:38	24	process attempt to look at constraints that
11:54:46	25	are more logically sound.

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11:54:48	1	So in terms of actual choice
11:54:50	2	making, if someone may be making choices
11:54:55	3	where they don't care about B/G/N networks,
11:54:58	4	then their value for that would
11:55:00	5	automatically be close to zero.
11:55:02	6	So it does not -- it's not -- it
11:55:05	7	is taking the logical approach to
11:55:08	8	measurement, and what this is doing is this
11:55:10	9	is putting a logical approach to the
11:55:14	10	mathematical sampling process that goes on.
11:55:17	11	One can take out, in my
11:55:19	12	experience one can take out these
11:55:21	13	constraints and rerun the results and you
11:55:28	14	will see that the results are very close to
11:55:30	15	-- because the sample size is large, the
11:55:33	16	model is, fit is considered very good when
11:55:37	17	you look at the RLH data that is there in
11:55:41	18	the utilities file. You will see that with
11:55:43	19	or without constraints the results would be
11:55:43	20	comparable.
11:55:47	21	Q. You'd agree with me that the
11:55:48	22	Sawtooth software does not require you for
11:55:51	23	the Wi-Fi attribute to constrain the levels
11:55:55	24	the way that you have done it here, correct?
11:55:57	25	A. It doesn't require me to do

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11:56:00	1	that. However, as I said, statistics and
11:56:04	2	mathematics, people who do mathematics and
11:56:06	3	statistics blindly often get answers that
11:56:10	4	are illogical and foolish and one has to be
11:56:14	5	very careful about making sure that the
11:56:16	6	machine does not blindly drive the answers.
11:56:21	7	Q. Exhibit 348 refers to 500
11:56:25	8	respondents in the middle there. Do you see
11:56:27	9	that?
11:56:27	10	A. Where is that?
11:56:38	11	Q. Page 1, in the middle.
11:56:44	12	A. Correct.
11:56:45	13	Q. Your report, I believe, for the
11:56:46	14	H.264 survey refers to 499 respondents. Can
11:56:51	15	you explain the difference?
11:56:53	16	A. So let me say this. When you go
11:56:58	17	back to how the process is done, when we hit
11:57:05	18	a number that is good enough to begin to do
11:57:08	19	analysis, we start -- we tend to indicate
11:57:11	20	you want to stop the survey. And the survey
11:57:15	21	itself doesn't physically stop. What
11:57:18	22	happens is the data is pulled in order to do
11:57:22	23	the analysis. So when the first set of data
11:57:25	24	was pulled to create the earlier tables, all
11:57:28	25	of these tables that are there in the

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11:57:30	1	report, 499 completed surveys were utilized
11:57:35	2	to do that.
11:57:36	3	By the time that the survey from
11:57:40	4	the CBC -- now the CBC server is different
11:57:44	5	than the server in which the rest of the
11:57:47	6	questions are collected. Confirmit is a
11:57:50	7	software which is used to ask questions like
11:57:52	8	QA1, QA2, QA8, etc., whereas CBC, Sawtooth
11:57:59	9	Software product is the one that is doing
11:58:01	10	those conjoint experiments.
11:58:02	11	So by the time the data was
11:58:04	12	pulled, we had one more extra respondent.
11:58:08	13	And in all my many years as an expert doing
11:58:12	14	survey research, one extra respondent does
11:58:15	15	not change or alter the results. In fact,
11:58:19	16	if anything, I've never seen results change
11:58:24	17	with one extra respondent, when you have
11:58:27	18	that big a number, when you have 500
11:58:29	19	respondents.
11:58:34	20	MS. THAYER: Let's mark as
11:58:35	21	Exhibit 349 MOTM_WASH1823_0606212.log.
11:58:56	22	(PX Exhibit 349 for
11:58:56	23	identification, Bates stamped
11:59:06	24	MOTM_WASH1823_0606212.log.)
11:59:06	25	Q. You can just confirm that this

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11:59:08	1	is a file similar to the one that we were
11:59:10	2	looking at in Exhibit 349, but that it
11:59:12	3	pertains to the 802.11 survey?
11:59:18	4	A. Yes, by looking at the file
11:59:20	5	name, by looking at the attributes and
11:59:26	6	levels, I can confirm that.
11:59:59	7	MS. THAYER: I'm about to move
12:00:00	8	on to a new subject.
12:00:02	9	THE WITNESS: Would it be fine
12:00:03	10	if we take a break again?
12:00:05	11	MS. THAYER: Yes, I was going to
12:00:07	12	say it's noon. Off the record.
12:00:09	13	THE VIDEOGRAPHER: One moment,
12:00:10	14	please. Here now marks the end of
12:00:12	15	tape 3 of the deposition of Dr. R.
12:00:15	16	Sukumar. The time is 12 noon, we are
12:00:17	17	now off the record.
12:00:19	18	(Luncheon recess: 12:00 p.m.)
	19	
	20	
	21	
	22	
	23	
	24	
	25	

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13:02:09	1	A F T E R N O O N S E S S I O N
13:04:37	2	1:02 p.m.
13:04:37	3	THE VIDEOGRAPHER: Here now
13:04:38	4	marks the beginning of tape 4 of the
13:04:39	5	deposition of Dr. R. Sukumar. The
13:04:43	6	time is 1:04 p.m., we're back on the
13:04:47	7	record.
	8	(PX Exhibit 350 for
	9	identification, pages excerpted from
	10	the book entitled "Introduction to the
	11	theory of statistics.")
	12	RAMAMIRTHAM SUKUMAR,
	13	resumed, having been previously duly
	14	sworn, was examined and testified
	15	further as follows:
	16	CONTINUED EXAMINATION
13:04:48	17	BY MS. THAYER:
13:04:48	18	Q. Good afternoon. I have marked
13:04:50	19	as Exhibit 350 the title page, copyright
13:04:53	20	page, and then the four pages that were
13:04:56	21	called out during this morning's testimony
13:04:58	22	from "Introduction to the theory of
13:05:00	23	statistics." So that's been marked as
13:05:02	24	Exhibit 350 so that I didn't have to copy
13:05:05	25	the whole book.

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13:05:05	1	Could you just confirm, please,
13:05:07	2	Dr. Sukumar, that I have copied the pages
13:05:09	3	that you were discussing earlier today?
13:05:12	4	A. Yes, that's correct.
13:05:23	5	Q. I have one follow-up question
13:05:25	6	for Exhibit 340 which I believe is on the
13:05:27	7	top of your stack right now, and you have
13:05:35	8	pointed out that on page 2, with respect to
13:05:37	9	the attribute of price, there are nine
13:05:41	10	different levels stated there going from 99
13:05:46	11	up to absent. Oh, sorry, up to 49.99. And
13:05:55	12	in $50 increments. Do you see that?
13:05:58	13	A. It's $499.99.
13:06:02	14	Q. Right.
13:06:03	15	A. $50 increments.
13:06:04	16	Q. Yes. I just wanted to clarify,
13:06:06	17	with respect to the actual survey that the
13:06:10	18	respondents saw for the pilot, were there --
13:06:18	19	was price presented in increments of $50 or
13:06:25	20	$100?
13:06:26	21	A. I don't recall exactly, but I do
13:06:37	22	believe that it was given in increments of
13:06:42	23	$50 and changed in the final survey to be a
13:06:54	24	hundred dollars.
13:06:55	25	Again, the 50 or the hundred

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13:06:57	1	doesn't impact. The endpoints that were
13:07:02	2	chosen were found to be reasonable by
13:07:04	3	respondents. The way conjoint works, you're
13:07:11	4	interpolating between those price points.
13:07:13	5	So therefore the 50 increment and hundred
13:07:17	6	increment is chosen so as to be more
13:07:19	7	realistic with what's out there from --
13:07:22	8	various products that are available in the
13:07:23	9	marketplace.
13:07:23	10	Q. What makes you think that the
13:07:25	11	pilot study had increments of $50 rather
13:07:28	12	than a hundred dollars?
13:07:29	13	A. I don't recall. As I said, I do
13:07:33	14	not have a copy of the pilot link right now
13:07:38	15	in front of me, so I -- it doesn't -- I
13:07:42	16	don't have it in front of me, so I cannot
13:07:45	17	reflect and say for sure what was done. It
13:07:49	18	does not impact my results and therefore,
13:07:53	19	that's why my comment is.
13:07:57	20	Q. All right. So excuse me for one
13:08:22	21	second. It looks like I left my outline in
13:08:24	22	the other room. That won't work. Okay.
13:08:48	23	Could you explain to me what the
13:08:52	24	802.11 standard is?
13:08:55	25	A. I'm not a technical expert, and

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13:08:59	1	what I understand is, so is what I used in
13:09:06	2	the survey in terms of what the Wi-Fi
13:09:09	3	capability of the 802.11 is. So I'm not a
13:09:16	4	technical expert to have to go into the
13:09:19	5	details of that.
13:09:20	6	Q. Do you know just generally what
13:09:22	7	it is?
13:09:22	8	A. I know that it is -- it's a
13:09:28	9	standard relevant to, again, as a consumer
13:09:32	10	would think about availability of Wi-Fi, or
13:09:36	11	Wi-Fi access, that's what it is.
13:09:37	12	Q. Do you know what's the
13:09:42	13	difference between 802.11 N and 802.11 B/G?
13:09:50	14	A. Again, I'm not a technical
13:09:52	15	expert. From what I understand, N is a, it
13:10:01	16	gives you multiple antennas, wider coverage.
13:10:08	17	As far as, you know, the utilities in the
13:10:14	18	report are concerned and the pricing in the
13:10:16	19	reports are concerned you can clearly see
13:10:18	20	that people, the consumers don't place much
13:10:21	21	difference on either just getting B and G or
13:10:25	22	B, G and N, that the value that they place
13:10:30	23	on one versus the other is not very
13:10:33	24	different from the results. I'm not a
13:10:35	25	technical expert and I don't want to get

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13:10:37	1	into commenting of specifics of what B/G and
13:10:40	2	B/G/N mean.
13:10:42	3	Q. Did you conduct any research to
13:10:44	4	determine whether or not the respondents to
13:10:46	5	the 802.11 survey knew what the difference
13:10:51	6	was between B/G or an N network was?
13:11:00	7	A. No, we did not conduct any,
13:11:05	8	anything explicit. However, we described
13:11:09	9	what Wi-Fi capability meant in the
13:11:14	10	attributes out here.
13:11:17	11	Q. Can you tell me what you're
13:11:18	12	referring to in that answer?
13:11:19	13	A. Sure. I'm looking at Exhibit F1
13:11:23	14	off -- excuse me, sorry. Deposition Exhibit
13:11:29	15	number 338, Exhibit F1, this would be in my
13:11:36	16	report, in which we describe Wi-Fi as being
13:11:47	17	built-in or external wireless networking
13:11:50	18	capability, where B supports bandwidth up to
13:11:53	19	11 megabits, G supports bandwidth up to 54
13:12:00	20	megabits, and wireless N supports higher
13:12:01	21	bandwidth and uses multiple wireless signals
13:12:04	22	and antennas.
13:12:05	23	So this description was shown
13:12:07	24	and people, when I say, respondents, survey
13:12:10	25	takers understood what it meant as they went

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13:12:13	1	through the conjoint exercise.
13:12:15	2	Q. Did you define anyplace where
13:12:21	3	what a B/G network was?
13:12:27	4	A. We define what a B network was
13:12:29	5	in this, and this is, again, Exhibit 338 of
13:12:33	6	my report, Exhibit F1 where we describe what
13:12:37	7	B supports, what G supports, and then what N
13:12:40	8	supports. So when respondents saw the
13:12:46	9	three, the B, G and N, the understanding
13:12:48	10	would be that you have all three of them
13:12:52	11	available. If you say any B and G, you just
13:12:55	12	have the two of them available.
13:12:56	13	Q. Did you define that anywhere,
13:12:59	14	what was meant by B/G or B/G/N?
13:13:05	15	A. No, it wasn't explicitly
13:13:16	16	defined. But again, in the levels it's
13:13:18	17	clear, compatible with both, with B and G
13:13:21	18	networks, or compatible with B/G/N networks.
13:13:26	19	Q. Was there a reason that you did
13:13:28	20	not define or use this 802.11 standard in
13:13:35	21	the survey?
13:13:37	22	MS. HOANG: Objection; form.
13:13:39	23	A. I'm not sure what you mean by
13:13:41	24	802.11 standard.
13:13:49	25	Q. This F1, Exhibit F1 survey is

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13:13:59	1	about the 802.11 standard, is it not?
13:14:06	2	MS. HOANG: Objection; form.
13:14:07	3	A. The survey is referred to as an
13:14:09	4	802.11 more so for convenience, but the
13:14:13	5	standard is reflected in the specific
13:14:16	6	attributes or benefits that from a consumer
13:14:19	7	point of view what benefits they get.
13:14:21	8	That's really what is being captured out
13:14:24	9	here.
13:14:24	10	Q. But was there a reason that you
13:14:26	11	chose not to use the term 802.11 in the, in
13:14:34	12	the screens, the choice screens?
13:14:40	13	MS. HOANG: Objection; form.
13:14:41	14	A. We describe what it reflects in
13:14:43	15	the form of the Wi-Fi networks and the
13:14:46	16	capabilities of those Wi-Fi networks.
13:14:48	17	Q. Is it your testimony that by
13:14:52	18	stating the bandwidth that supported, that's
13:14:56	19	the same thing as the 802.11 standard
13:15:01	20	itself?
13:15:01	21	MS. HOANG: Objection; form.
13:15:02	22	A. I'm not a technical expert. It
13:15:05	23	is my understanding that the 802.11 is
13:15:11	24	reflected in that particular benefit.
13:15:20	25	Similar to something like Dolby, you know.

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13:15:31	1	Q. Do you know whether or not you
13:15:32	2	can -- strike that.
13:15:38	3	Do you know what the
13:15:38	4	relationship is between bandwidth and the
13:15:42	5	802.11 standard?
13:15:46	6	MS. HOANG: Objection.
13:15:47	7	A. I'm not a technical expert. I
13:15:49	8	didn't need to know that here. I really
13:15:52	9	needed to know more what benefit the
13:15:54	10	consumer gets out of it.
13:15:55	11	Q. Are you aware of which of the
13:16:02	12	Motorola patents at issue in this case
13:16:04	13	pertain to the 802.11 standards?
13:16:08	14	A. I'm not aware of it. I'm not a
13:16:10	15	patent expert.
13:16:11	16	Q. Did you look at any patents in
13:16:12	17	connection with the preparation of your
13:16:14	18	survey?
13:16:14	19	A. No, I did not.
13:16:15	20	Q. Did you attempt to assess an
13:16:23	21	MVAI for any particular patented feature
13:16:27	22	within the Motorola patents?
13:16:31	23	MS. HOANG: Objection; form.
13:16:32	24	A. I'm not a patent expert. The
13:16:34	25	way -- it's conversations with counsel about

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13:16:39	1	the benefits from the patent and it's the
13:16:41	2	patent benefits and the patent features data
13:16:45	3	is described in consumer terminology.
13:16:48	4	Q. What were you told by counsel
13:16:49	5	about the benefits from the patents that you
13:16:51	6	were attempting to assess?
13:16:55	7	(Instruction not to answer.)
13:16:55	8	MS. HOANG: Objection. Stop,
13:16:56	9	don't answer that question. I'm going
13:16:58	10	to instruct you not to answer on the
13:16:59	11	basis of work product.
13:17:01	12	MS. THAYER: Well I think that's
13:17:02	13	improper given the survey. We'll take
13:17:04	14	that up with the judge. Because I
13:17:06	15	think the decision on what features
13:17:07	16	and benefits to select to test is the
13:17:10	17	whole point of this study.
13:17:14	18	MS. HOANG: We're going to have
13:17:15	19	to debate that later.
13:17:17	20	MS. THAYER: Okay.
13:17:17	21	Q. What is the H.264 standard?
13:17:21	22	A. Again, I'm not a technical
13:17:23	23	expert. In my understanding, that H.264 has
13:17:27	24	to do with streaming video and high
13:17:33	25	definition content, again, the features and

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13:17:36	1	the benefits of which were included in the
13:17:39	2	conjoint.
13:17:40	3	Q. Did you -- are you aware of
13:17:46	4	which Motorola patents pertained to the
13:17:50	5	H.264 standard?
13:17:51	6	A. I'm not a patent expert. I
13:17:54	7	wouldn't be able to answer that.
13:17:58	8	Q. Did you attempt to evaluate the
13:18:00	9	MVAI of any of the patented features in the
13:18:06	10	Motorola patents pertaining to video
13:18:13	11	content?
13:18:13	12	MS. HOANG: Objection; form.
13:18:15	13	A. The features, I used the
13:18:17	14	features that are described in the survey
13:18:18	15	and the benefits, and that's what I tested
13:18:22	16	in my survey.
13:18:23	17	Q. And what features were those
13:18:25	18	with respect to the H.264?
13:18:27	19	A. So again, I'm not a patent
13:18:30	20	expert, but my understanding would be that
13:18:37	21	these include playing games, watch movies
13:18:45	22	and listen to music uninterrupted, stream or
13:18:49	23	download HD video content. It has to do
13:18:51	24	with the high definition, decoding
13:18:54	25	capability, and then watch HD live

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13:18:57	1	television, high definition movies from USB
13:19:01	2	ports and Blu-Ray disks.
13:19:02	3	And these were described in
13:19:05	4	explanations that were pilot tested with the
13:19:08	5	respondents.
13:19:13	6	Q. With respect to, for example, if
13:19:16	7	you turn to Exhibit F2, the first choice
13:19:26	8	screen. I can't direct you to a page number
13:19:33	9	because it's not paginated. When I asked
13:19:49	10	you about the features described in the
13:19:53	11	survey that pertain to the H.264 standard,
13:19:57	12	you listed three of those, did you not?
13:19:59	13	A. Could you repeat that, I'm not
13:20:08	14	quite sure I understood that.
13:20:11	15	MS. THAYER: Could you read it
13:20:11	16	back and let me listen to it.
13:20:13	17	(Record read as requested.)
13:20:29	18	MS. HOANG: Can we just double
13:20:31	19	check and make sure you're looking at
13:20:32	20	what he's looking at. Can you read
13:20:35	21	the first sentence or something.
13:20:39	22	Q. There are four columns, first
13:20:42	23	one numbered 2, second one numbered 1, third
13:20:45	24	one numbered 3.
13:20:46	25	A. Okay.

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13:20:46	1	Q. And at the bottom it goes
13:20:51	2	present, absent, absent. The bottom row.
13:20:55	3	A. Yes. So I had described the
13:21:00	4	words play games, watch movies and listen to
13:21:05	5	music uninterrupted. H.2 -- sorry, stream
13:21:11	6	or download HD video content, decoding
13:21:15	7	capability, and watch high definition live
13:21:17	8	television, high definition movies from USB
13:21:21	9	ports and Blu-Ray discs.
13:21:24	10	Again, I had mentioned these,
13:21:26	11	these four, but I also want to mention again
13:21:28	12	what I said earlier. I'm not a patent
13:21:30	13	expert. These are features and benefits
13:21:31	14	that I believe relate -- are all related in
13:21:35	15	some sense to the H.264 patent.
13:21:38	16	Q. So when you calculated the MVAI
13:21:54	17	-- strike that.
13:21:56	18	Would you look at table 11. So
13:22:22	19	there's an attribute there that says stream
13:22:24	20	or download HD video content. Do you see
13:22:28	21	that?
13:22:28	22	A. Yes.
13:22:29	23	Q. Does the MVAI that you
13:22:33	24	calculated there correspond only to the
13:22:37	25	attribute on the page we were just looking

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13:22:40	1	at that says stream or download HD video
13:22:43	2	content, or did it also take into account
13:22:47	3	other attributes that pertain to the H.264
13:22:53	4	standard?
13:22:56	5	MS. HOANG: Objection; form.
13:22:57	6	A. It would take only into account
13:22:59	7	that particular benefit, whether it's
13:23:02	8	present or absent, as we defined in the
13:23:05	9	Exhibit F2 that we talked about a little
13:23:08	10	while ago.
13:23:08	11	Q. So you treated these as
13:23:16	12	independent features; is that right?
13:23:19	13	A. That's correct.
13:23:23	14	Q. In what way is the ability to
13:23:29	15	download HD video content independent from
13:23:34	16	the H.264 decoding capability?
13:23:39	17	MS. HOANG: Objection; form.
13:23:41	18	A. So the decoding, I mean this is
13:23:46	19	my understanding, the decoding capability is
13:23:49	20	more a, what I would call a feature and the
13:23:53	21	ability to stream or download the HD video
13:23:56	22	content would be more a benefit. It's
13:24:01	23	similar to saying my laptop weighs 2 pounds,
13:24:05	24	versus my laptop is convenient for me to
13:24:08	25	carry anywhere I want to go.

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13:24:09	1	That would be the distinction
13:24:11	2	between the two.
13:24:12	3	Q. Well then streaming or
13:24:15	4	downloading would be the benefit of the
13:24:16	5	feature of H.264 decoding capability?
13:24:20	6	A. Could be one of the benefits
13:24:22	7	from that.
13:24:22	8	Q. So in that respect they're not
13:24:25	9	independent, are they?
13:24:25	10	A. Well, one has to do with --
13:24:32	11	they're independent in the sense that there
13:24:35	12	may be, again, I'm not a patent expert, I'm
13:24:38	13	not a technology expert, so I want to make
13:24:40	14	sure that these are clearly understood.
13:24:43	15	Streaming, or downloading of video content
13:24:46	16	is described, has the ability to receive
13:24:49	17	that content and -- from a user perspective.
13:24:55	18	Whereas the H.264 is more a
13:24:57	19	decoding capability, which is understood
13:25:03	20	differently by different, you know, by the
13:25:06	21	-- as described in the expression that is
13:25:08	22	there, in the definition that is and in the
13:25:14	23	survey it is understood more as a decoding
13:25:16	24	capability off of the box.
13:25:18	25	So you have to have the ability

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13:25:20	1	to decode what you're receiving.
13:25:22	2	Again, I'm not a technical
13:25:24	3	expert so I just want to make sure you
13:25:26	4	understand that.
13:25:27	5	Q. What is your evidence that a
13:25:29	6	respondent performing the survey would
13:25:36	7	understand H.264 decoding capability to be
13:25:41	8	either dependent on or independent from
13:25:45	9	stream or download HD video content?
13:25:48	10	A. As far as, you know, we did the
13:25:57	11	pilot test, we've expressed what the
13:26:01	12	H.264 -- again, I need to go back, if you
13:26:04	13	give me a second here, to the description
13:26:08	14	that was used. Built-in H.264 decoding
13:26:15	15	capability supports decoding of video
13:26:17	16	available over the internet. So this one is
13:26:21	17	more supporting the access of the internet;
13:26:24	18	even the benefit there of H.264 is
13:26:27	19	described. Whereas the other one is
13:26:30	20	streaming of downloading HD video content.
13:26:33	21	If you look at the way they're written,
13:26:35	22	they're almost complementary. They support
13:26:38	23	each other. You would want to have both.
13:26:40	24	If you're a user you would want to have
13:26:43	25	both. But you might be someone who, you

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13:26:45	1	might be an individual who only wants the
13:26:46	2	ability to access it on the internet and not
13:26:48	3	necessarily want to download it onto their
13:26:50	4	machines and view it in that fashion.
13:26:52	5	And that's really what is
13:26:54	6	reflected on there and the consumers and the
13:26:56	7	people, when we pilot tested it they
13:26:58	8	understood the difference and the choices
13:27:01	9	they made are reflective of that.
13:27:02	10	Q. Can you stream HD video content
13:27:05	11	without decoding?
13:27:08	12	MS. HOANG: Objection; form.
13:27:12	13	A. I'm not a technical expert, I
13:27:15	14	wouldn't even go down that path.
13:27:16	15	Q. Can you download HD video
13:27:20	16	content without decoding?
13:27:22	17	MS. HOANG: Same objection.
13:27:27	18	A. I wouldn't know that for a fact.
13:27:31	19	I'm not a technical expert.
13:27:33	20	Q. And then respondents understood
13:27:35	21	stream or download HD video content to be,
13:27:37	22	to include streaming or downloading from the
13:27:41	23	internet?
13:27:43	24	A. Let's go back and look at what
13:27:45	25	we describe for them. So H.264 decoding

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13:27:52	1	capability was supports decoding of video
13:27:58	2	available over the internet, and then stream
13:28:01	3	or download HD video content as the ability
13:28:05	4	to stream or download high definition video
13:28:07	5	content.
13:28:09	6	So one is the ability to access,
13:28:15	7	the other is the ability to receive.
13:28:18	8	Q. Which one is the ability to
13:28:19	9	access and which is the ability to receive?
13:28:21	10	A. I would say the decoding
13:28:23	11	capability, and the other one, the stream or
13:28:26	12	download HD video content is the ability to
13:28:28	13	receive them downloaded.
13:28:30	14	Q. So I'm sorry, could you -- could
13:28:34	15	you read that back to me.
13:28:43	16	(Record read as requested.)
13:28:44	17	Q. I'm sorry, I didn't understand.
13:28:48	18	As between H.264 decoding capability and
13:28:53	19	stream or download HD video content, which
13:28:55	20	of those two do you interpret to relate to
13:29:00	21	accessing and which one do you understand to
13:29:05	22	relate to, what was your other term,
13:29:11	23	retrieving?
13:29:11	24	A. Yes. So if you go back and look
13:29:13	25	at how these were described, which was pilot

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13:29:19	1	tested, it supports decoding of video
13:29:23	2	available over the internet. So the words
13:29:25	3	are supports decoding of the video available
13:29:27	4	over the internet. That's the H.264. So
13:29:32	5	that's more the ability to access according
13:29:35	6	to me. I'm not a technical expert.
13:29:37	7	And then the other one is stream
13:29:39	8	or download high definition video content,
13:29:42	9	it says ability to stream or download high
13:29:44	10	definition video content.
13:29:46	11	So for consumers who saw that it
13:29:48	12	was very clear and they seemed to
13:29:51	13	understand, in my interpretation of it, as
13:29:53	14	you ask me that question now, is that this
13:29:55	15	is more the ability to be able to view it.
13:30:00	16	It's the downloading capability of it.
13:30:16	17	Q. Did Ms. Pasternack specifically
13:30:17	18	ask any of the respondents in her two mall
13:30:23	19	interview, interview sessions about the
13:30:26	20	difference between those two items?
13:30:29	21	A. I'm not aware of that. And from
13:30:32	22	the -- from what I needed for finalizing the
13:30:35	23	survey, I was informed, debriefed by her
13:30:39	24	that there was no difficulty in
13:30:41	25	understanding those attributes.

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13:30:42   1   Q.   Do you know if she specifically
13:30:45   2   discussed with anybody whether they could
13:30:47   3   distinguish between those two features?
13:30:49   4   A.   I do not know for sure.
13:30:52   5   Q.   I note that in table 11 and in
13:31:04   6   table 15 the attribute of built-in Wi-Fi
13:31:08   7   compatible with B/G/N networks is listed.
13:31:10   8   Do you see that?
13:31:13   9   A.   Yes.
13:31:14   10   Q.   Why did you test that attribute
13:31:16   11 in both surveys?
13:31:20   12   A.   We tested that, I mean it's,
13:31:23   13 again, the Wi-Fi capability is something
13:31:28   14 that consumers would want if you're looking
13:31:34   15 for other kinds of things like streaming and
13:31:36   16 downloading. Though I understand you can
13:31:38   17 access, you can stream or download using
13:31:40   18 other approaches.
13:31:42   19   So having Wi-Fi is necessary in
13:31:47   20 some sense to be able to access online
13:31:50   21 content and therefore we included that.
13:31:52   22   Q.   What other approaches can you
13:31:56   23 use to stream or download?
13:31:59   24   A.   Well, one of them is included
13:32:02   25 right here, which is, you know, you have the

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13:32:03   1   ability to accept a Wi-Fi adapter, so you
13:32:06   2   don't have it built in, but you may have an
13:32:08   3   adapter that you can include and be able to
13:32:12   4   use that adapter.
13:32:13   5   Q.   You need to back up. I asked
13:32:16   6   you why you tested built-in Wi-Fi compatible
13:32:20   7   with B/G/N networks in both surveys and you
13:32:25   8   said it's something that consumers would
13:32:29   9   want and then you contrasted that with
13:32:32   10 streaming or downloading video. I thought
13:32:36   11 that's what your answer was. Did I
13:32:38   12 misunderstand you?
13:32:39   13   A.   Well, what I said is the reason
13:32:42   14 we included it was that we believed that it
13:32:44   15 is an important attribute to include out
13:32:47   16 there and downloading would require one of
13:32:53   17 those features in there. So we included
13:32:55   18 that feature in the H.264 survey as well.
13:32:59   19   Q.   My question to you is why did
13:33:01   20 you include the question about Wi-Fi in both
13:33:04   21 surveys? Why did you ask that question in
13:33:08   22 both? Or excuse me, test that feature in
13:33:11   23 both surveys?
13:33:12   24   A.   Because we felt it was an
13:33:15   25 important attribute of testing both surveys.

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13:33:17   1   Q.   Was it more important than the
13:33:19   2   H.264 decoding?
13:33:22   3   A.   That was, you know, we included
13:33:24   4   it in the survey. If it was not important
13:33:26   5   for the consumers, it would have reflected
13:33:28   6   it in the results. We included it with the
13:33:33   7   intent that we wanted to assess if consumers
13:33:37   8   found those attributes to be important and
13:33:39   9   if the consumers were, when they made
13:33:45   10 choices, their choices were reflective of
13:33:48   11 the features that were included in there.
13:33:49   12   Q.   Why did you test built-in Wi-Fi
13:33:53   13 compatible with B/G/N twice and not test
13:33:57   14 H.264 decoding capability twice?
13:34:01   15   A.   The surveys as instructed to me
13:34:08   16 by counsel, had different purposes. One was
13:34:10   17 focused, you know, with an intent where, you
13:34:20   18 know, the H.264 was less of a concern and
13:34:23   19 clearly the attributes there were reflective
13:34:26   20 of Xboxes that may or may not have the
13:34:31   21 H.264.
13:34:32   22   Whereas in this one, when we
13:34:34   23 described the products, the Xbox 360
13:34:37   24 products, we included the benefits from
13:34:40   25 streaming or downloading high definition

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13:34:42   1   content in there. So the objective here was
13:34:46   2   to see, you know, what that MVAI would be if
13:34:52   3   streaming content were available. I mean
13:34:56   4   it...
13:34:56   5   Q.   Why did you not test both H.264
13:35:03   6   and built-in Wi-Fi in both surveys?
13:35:09   7   A.   Again, the objectives were very
13:35:11   8   different. The objectives in the other
13:35:13   9   survey was to look at a set of Xbox 360s
13:35:18   10 that the streaming content was not -- you
13:35:22   11 know, potentially not even available.
13:35:24   12 Whereas over here, keep in mind that choice
13:35:28   13 based conjoint is an attempt to reflect what
13:35:32   14 products that might be available in the
13:35:35   15 marketplace.
13:35:35   16   So the 802.11 survey was
13:35:40   17 reflective of features, you know, that did
13:35:44   18 not have the high definition content
13:35:46   19 available. The H.264 reflected that, the
13:35:50   20 availability of that content.
13:35:53   21   Q.   Well you'd agree with me that
13:35:55   22 you, in neither survey did you include all
13:35:58   23 the features of an Xbox product within the
13:36:05   24 choice boxes, did you?
13:36:07   25   A.   I would agree with you that all

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13:36:10 1   the features are not included. However,
13:36:15 2   there is a clear statement that says assume
13:36:18 3   all other features that are not included are
13:36:21 4   held constant. It is customary to -- you
13:36:25 5   know, it is common in survey research and
13:36:29 6   conjoint research to hold all of those other
13:36:33 7   features constant because the mathematical,
13:36:36 8   statistical model assumes that those are
13:36:38 9   included in the other structure.
13:36:39 10   Additionally, when we did the
13:36:41 11 initial, the initial interviews, one of the
13:36:44 12 things that we are looking for is the
13:36:48 13 ability to understand from either the
13:36:51 14 customer point of view or from looking at,
13:36:54 15 you know, choices that are available at a
13:36:57 16 bestbuy.com or other places as to what might
13:37:00 17 be features that are more or less prominent.
13:37:02 18   And that's basically what is
13:37:07 19 being done out here. This is an
13:37:08 20 experimental testing that you're doing here
13:37:10 21 in trying to see how people make those
13:37:12 22 choices.
13:37:12 23   Q.   You could have conducted a
13:37:15 24 conjoint survey with respect to the H.264
13:37:18 25 standard that did not include an attribute

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13:37:23 1   for Wi-Fi, couldn't you?
13:37:25 2   A.   We could have done that. But
13:37:27 3   that would not have changed the results in
13:37:30 4   any fashion. You can clearly see that from
13:37:34 5   including it and comparing the results
13:37:37 6   they're not dramatically different.
13:37:38 7   Q.   What is it that you're comparing
13:37:40 8   that you're concluding is not dramatically
13:37:42 9   different?
13:37:43 10   A.   If I look at the 802.11 survey
13:37:46 11 with the objective was focusing more on
13:37:49 12 Wi-Fi, versus the -- and the choices that
13:37:52 13 people make between Wi-Fi and other features
13:37:54 14 that drive the choice of Xbox 360 versus
13:37:58 15 down here in the H.264 here on page 11 of my
13:38:04 16 report, where they have not only the Wi-Fi
13:38:06 17 features, they also have the ability to
13:38:09 18 choose a product with streaming video
13:38:11 19 content, or high definition content.
13:38:14 20   If you look at the MVAI numbers
13:38:16 21 from the two of them, you see they're at,
13:38:20 22 you know, there is some difference, but the
13:38:22 23 difference is not dramatic. It did not
13:38:24 24 drive, the availability of high definition
13:38:25 25 content did not drive the presence of Wi-Fi

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13:38:30 1   at B/G or B/G/N networks, the MVAI for that
13:38:35 2   to zero.
13:38:35 3   I mean it was very clear and
13:38:38 4   evident that these are features that people,
13:38:40 5   that consumers care about and their choices
13:38:45 6   are driven by the availability of these
13:38:47 7   features.
13:38:52 8   Q.   And table 1 there's weighted
13:38:54 9   MVAI for built-in Wi-Fi compatible with
13:38:58 10 B/G/N networks.
13:39:00 11   A.   Table 1?
13:39:01 12   Q.   It should be. Table 15. And
13:39:10 13 the MVAI reported there is outside of the
13:39:13 14 confidence levels of the MVAI reported for
13:39:18 15 the same attribute in table 11. Can you
13:39:21 16 explain that?
13:39:23 17   A.   So again, I'm going to give you
13:39:29 18 an explanation not knowing exactly what --
13:39:32 19 what explanation you're looking for. There
13:39:34 20 is a difference, you can clearly see the
13:39:37 21 built-in Wi-Fi compatible B/G/N networks in
13:39:41 22 table 11 has an MVAI of $95.32. The same in
13:39:46 23 the, in table 15 which was the 802.11 survey
13:39:51 24 is 127.60. The lower and upper confidence
13:39:56 25 levels for table 11 are $79.31 to the upper

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13:40:01 1   confidence level $110.71.
13:40:04 2   If you look at table 15, now the
13:40:06 3   number is $113.41 for lower confidence level
13:40:11 4   and the upper confidence level is $141.62.
13:40:15 5   So when you look at the 113 for
13:40:20 6   table 15, it is close to but different than
13:40:25 7   the $110.71 for the upper confidence level
13:40:30 8   given in table 11. What that is suggesting
13:40:33 9   is at least at the 95 percent confidence
13:40:36 10 level that these two numbers are different.
13:40:39 11   However, when you look at the
13:40:42 12 point estimate that is the estimate, the
13:40:46 13 95.32 and the 127.60, the difference there
13:40:50 14 is accounted for the availability of high
13:40:51 15 definition streaming video and some of the
13:40:53 16 other attributes that are described in
13:40:55 17 there.
13:40:55 18   The difference could be
13:40:58 19 attributed, they could be allocated to the
13:41:01 20 fact that now when we did the H.264 survey
13:41:05 21 there are additional benefits that are being
13:41:08 22 made available to the respondent and
13:41:10 23 therefore, they're willing to place more
13:41:12 24 emphasis on some of those other features.
13:41:14 25   Q.   So you conclude from the fact

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13:41:17	1	that the range of Wi-Fi compatible with
13:41:23	2	B/G/N networked MVAI is outside the
13:41:29	3	confidence level of the MVAI that you
13:41:32	4	computed in table 11, you conclude from that
13:41:35	5	that it was the availability of H.264
13:41:40	6	decoding that reduced the MVAI in table 11?
13:41:46	7	A. It could be that or it could be
13:41:48	8	some of the other features that were
13:41:50	9	available. And you can see that in the
13:41:53	10	process of doing this, you know, the
13:41:56	11	standard features were probably
13:41:58	12	under-valued.
13:41:58	13	And this is a typical thing. As
13:42:00	14	market shifts, then when newer features are
13:42:05	15	made available, consumers will place more
13:42:08	16	emphasis on that, and some of the existing
13:42:10	17	features, like the number of USB ports or
13:42:13	18	the number of controllers, these become
13:42:18	19	table stakes, they become less in value
13:42:21	20	because the emphasis is on some of these
13:42:23	21	additional features that are coming out of
13:42:25	22	the marketplace.
13:42:26	23	Q. Did you do any research to
13:42:27	24	actually determine why the MVAI was, for
13:42:36	25	built-in Wi-Fi, etc., was significantly less

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13:42:39	1	in one study than the other?
13:42:41	2	A. I did not do any research,
13:42:46	3	certainly by going back and talking to any
13:42:48	4	of these consumers. However, the results in
13:42:51	5	both of the surveys are valid and they're
13:42:54	6	very much reflective of what consumers saw
13:42:58	7	in the choices that they had to make and how
13:43:01	8	much emphasis or value they place on the
13:43:04	9	choices that they made.
13:43:04	10	Q. So would it be fair to say then
13:43:08	11	that the MVAI that's represented in table 11
13:43:11	12	is not an absolute value, but rather it's a
13:43:14	13	value in the context of the other features
13:43:18	14	presented to the respondent in that
13:43:21	15	particular survey?
13:43:22	16	A. It's a value that, it could --
13:43:27	17	when a consumer is presented with these
13:43:29	18	choices, it is a value that the consumer is
13:43:33	19	placing on a feature, and given the various
13:43:39	20	other things that are available to him, the
13:43:41	21	various other, him or her, so given what
13:43:44	22	else is available to him, that's what it is
13:43:48	23	reflective of.
13:43:49	24	Q. So it's not an absolute measure
13:43:52	25	of value; is that fair?

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13:43:54	1	A. It's reflective of the
13:44:00	2	consumer's emphasis on, you know, when
13:44:05	3	presented with choices, when presented with
13:44:07	4	choices at different price points, how much
13:44:12	5	would they be -- in effect, what is a
13:44:15	6	maximum value, a maximum price they might be
13:44:18	7	willing to pay for that particular feature.
13:44:21	8	That's what it's reflective of.
13:44:23	9	Q. And if that consumer is
13:44:24	10	presented with a different set of choices,
13:44:26	11	the maximum they might be willing to pay for
13:44:28	12	the same feature might be less?
13:44:32	13	MS. HOANG: Objection; form.
13:44:33	14	A. If they were presented with the
13:44:37	15	several features that are not in here, they
13:44:42	16	-- if they value those features a lot less,
13:44:45	17	so let us assume, for example, that the
13:44:48	18	choice test did not include anything to do
13:44:50	19	with any of these features and they were
13:44:53	20	only looked at in terms of the number of
13:44:56	21	controllers and the price point or the brand
13:45:01	22	or, you know, USB ports, and if they really
13:45:06	23	didn't care about any of those features,
13:45:08	24	they are more likely to place emphasis on
13:45:11	25	something, they're either going to suggest

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13:45:14	1	that they're not going to buy any of them
13:45:16	2	because they are looking for other things,
13:45:17	3	or they're going to place less value on
13:45:21	4	these things and you will see that the
13:45:23	5	explanation would be devoid of things that
13:45:27	6	they really value.
13:45:28	7	So they'll place low emphasis on
13:45:31	8	controllers, low emphasis on USBs. They'll
13:45:33	9	be picking every time the option none. And
13:45:36	10	one of the choices here is none, and none
13:45:40	11	will get a bigger demand or a bigger share.
13:45:43	12	Q. Can you try and answer my
13:45:44	13	question just yes or no. If you can't, you
13:45:46	14	can't, but could you listen to it and see if
13:45:49	15	you could answer it yes or no.
13:45:51	16	A. Sure.
13:45:52	17	Q. Would it be fair to say that the
13:45:53	18	MVAI that's reported in tables 11 and 15 for
13:45:58	19	built-in Wi-Fi compatible with B/G/N, is not
13:46:05	20	an absolute number, but rather a comparative
13:46:08	21	number based on the other features that are
13:46:10	22	presented to the respondent in the choice
13:46:16	23	models?
13:46:16	24	A. Can I ask you to go back and
13:46:18	25	rephrase it for me so that the exact answer,

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13:46:21	1	what is a yes or no, just so I can explain
13:46:24	2	that.
13:46:24	3	Q. Sure.
13:48:16	4	(Record read as requested.)
13:48:17	5	A. Could you repeat for me the
13:48:18	6	first, because I want to make sure that I
13:48:21	7	understand the question. It's not a simple
13:48:23	8	question, that's got a couple of different
13:48:26	9	--
13:48:29	10	MS. THAYER: Counsel, would you
13:48:30	11	mind if he read the question?
13:48:32	12	Sometimes it's harder to keep it --
13:48:34	13	MS. HOANG: Read it. If you
13:48:35	14	understand it, answer it. If you
13:48:37	15	don't, let us know.
13:48:38	16	(Record read as requested.)
13:49:16	17	A. So it is, the -- so the answer
13:49:21	18	is it is an absolute number in the context
13:49:24	19	of what's presented to the respondents. So
13:49:29	20	the context that was presented in the 802.11
13:49:33	21	is as described in the survey there.
13:49:35	22	Context presented in the H.264 had
13:49:39	23	additional benefits.
13:49:40	24	So when you add additional
13:49:42	25	benefits, you would see the shifting of

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13:49:46	1	value.
13:49:47	2	So that is what a -- you know,
13:49:50	3	my answer to your question would be it is an
13:49:52	4	absolute within the context of what you're
13:49:54	5	seeing there.
13:49:54	6	Q. But if the context changes, then
13:49:56	7	the value may change as well?
13:49:58	8	A. The value may change.
13:50:00	9	Q. Now, in your H.264 survey, did
13:50:07	10	you anywhere define what MBAFS -- excuse
13:50:12	11	me -- MBAFF means?
13:50:15	12	A. The -- let me go back to -- give
13:50:23	13	me one second here. Now I'm completely
13:50:39	14	confused. So we had described what MBAFF
13:50:52	15	was in the form of Macroblock adapter
13:50:55	16	framework/field in the survey. This is
13:50:58	17	question QH5A1.
13:51:03	18	Q. Did you do any research to
13:51:04	19	determine whether any of the respondents
13:51:07	20	understood what that is?
13:51:10	21	A. I mentioned earlier that I --
13:51:12	22	this was not a pilot tested question.
13:51:15	23	Additionally, the exact question
13:51:16	24	was written in a very simple term, and the
13:51:19	25	terminology MBAFF, you know. If someone did

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13:51:23	1	not understand that question, they had an
13:51:25	2	opt-out in the form of answering I'm not
13:51:27	3	sure, I don't know what it is.
13:51:32	4	Q. So is the answer to my question
13:51:34	5	yes or no?
13:51:34	6	A. We have not pilot tested this, I
13:51:36	7	mentioned that earlier.
13:51:37	8	Q. Well I just was asking more
13:51:39	9	broadly was there any research done to
13:51:41	10	determine if respondents understood what
13:51:43	11	that was?
13:51:43	12	A. There was no research done.
13:51:45	13	There was no pilot test done.
13:52:02	14	Can I -- can I ask for a short
13:52:04	15	bio break, real short.
13:52:04	16	MS. THAYER: Oh, of course, we
13:52:05	17	can take a break.
13:52:07	18	THE VIDEOGRAPHER: One moment,
13:52:07	19	please, watch your microphones. The
13:52:09	20	time is now 1:52 p.m., we're off the
13:52:11	21	record.
13:52:12	22	(A recess was taken.)
14:03:03	23	THE VIDEOGRAPHER: The time is
14:03:10	24	2:03 p.m., we're back on the record.
14:03:13	25	Q. I'm going to ask you now,

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14:03:17	1	please, to pull out the, I think you've
14:03:20	2	already got it, Exhibit 338, which is the
14:03:22	3	initial report and turn to page 10, please.
14:03:43	4	There's a table 10 there, do you see?
14:03:45	5	A. Yes.
14:03:46	6	Q. The text states that this, this
14:03:48	7	table indicates the desirability ratings.
14:03:51	8	Could you tell me how those desirability
14:03:53	9	ratings were calculated?
14:03:57	10	A. So in the survey we ask the
14:04:00	11	question -- and I will go to Exhibit F2.
14:04:13	12	Just give me one second. Okay, so we have a
14:05:15	13	question that says "Please indicate how
14:05:17	14	desirable is the ability to play Blu-Ray
14:05:20	15	discs on your Xbox Console." And then the
14:05:24	16	scale question there is completely
14:05:27	17	undesirable, undesirable, neutral,
14:05:29	18	desirable, completely desirable.
14:05:31	19	And that same question was
14:05:33	20	repeated for "Please indicate how desirable
14:05:36	21	to you is the ability to view websites with
14:05:41	22	video using Internet Explorer on your Xbox
14:05:45	23	Console." And then a -- with the same
14:05:50	24	desirability scale.
14:05:51	25	And the question was asked again

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14:05:52	1	of all the respondents, "Please indicate how
14:05:56	2	desirable to you is the ability to decode
14:05:58	3	H.264 encoded video on your Xbox Console."
14:06:05	4	And then a description is given there for
14:06:08	5	H.264, "MPEG-4 or AVC is a standard for
14:06:11	6	video compression, and is used for
14:06:14	7	recording, compression and distribution of
14:06:16	8	high definition video."
14:06:18	9	And these were the counts of how
14:06:19	10	many people said, of the 499 respondents,
14:06:24	11	23.4 percent said that the Blu-Ray discs was
14:06:27	12	completely desirable, ability to view video
14:06:32	13	on websites using internet Explorer, 27.7
14:06:36	14	percent, ability to decode H.264, 20.8
14:06:40	15	percent, desirable, those are the numbers,
14:06:44	16	the 30.7 percent for Blu-Ray discs, 28.3
14:06:48	17	percent in column 2 and so on.
14:06:50	18	Q. Why would a respondent say that
14:06:54	19	the ability to play Blu-Ray discs was
14:06:58	20	undesirable?
14:07:00	21	A. So I have -- obviously, I -- the
14:07:06	22	survey taker is taking the survey, so I
14:07:09	23	don't know exactly what was in the mind of
14:07:11	24	that very specific respondent. However,
14:07:14	25	there could be a number of reasons. And as

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14:07:16	1	a consumer myself, it's possible that you
14:07:21	2	have a large video, you know, collection
14:07:25	3	that are not Blu-Ray DVDs and you may or may
14:07:29	4	not find that desirable because, you know,
14:07:31	5	you don't care much about the ability to
14:07:35	6	play Blu-Ray discs on there.
14:07:37	7	Q. Yes, but why would that
14:07:40	8	respondent check the box undesirable rather
14:07:43	9	than neutral?
14:07:45	10	MS. HOANG: Objection; form.
14:07:47	11	A. I don't know the answer to that
14:07:48	12	question. It's a survey respondent. They
14:07:50	13	feel strongly about it. They have the
14:07:52	14	ability to check undesirable.
14:07:53	15	Q. So you don't find it at all odd
14:07:58	16	that 12.6 percent of respondents answered
14:08:02	17	either undesirable or completely undesirable
14:08:05	18	with respect to having the ability to play
14:08:12	19	Blu-Ray discs?
14:08:14	20	A. I don't find that odd, no.
14:08:16	21	Q. So it's your view that it would
14:08:22	22	be typical for a consumer to find it
14:08:25	23	undesirable for a product to have an extra
14:08:31	24	attribute?
14:08:33	25	MS. HOANG: Objection; form.

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14:08:35	1	A. Again, I don't know what's in
14:08:36	2	the minds of the consumer. The consumer may
14:08:38	3	have various circumstances and they may
14:08:41	4	decide that it is undesirable for them to
14:08:43	5	have them. And they've been given the
14:08:46	6	opportunity to provide that answer and it's
14:08:48	7	a small percentage of people right there.
14:08:53	8	Q. Would that sort of an answer be
14:08:55	9	consistent with a respondent that's not
14:09:04	10	paying much attention to the survey and
14:09:06	11	simply completing it quickly to then be able
14:09:09	12	to get their reward?
14:09:10	13	A. I don't believe so. I don't
14:09:10	14	think it's consistent with any of that.
14:09:12	15	Q. Why would that not be consistent
14:09:15	16	with somebody who was just racing through
14:09:17	17	the survey without paying much attention?
14:09:19	18	A. Because the scale has a clear
14:09:22	19	five point scale. If they picked
14:09:24	20	undesirable because they're racing through
14:09:26	21	it, they could also have equally, have equal
14:09:29	22	probability of picking up desirable. So
14:09:31	23	therefore, you know, there's no -- you can't
14:09:35	24	presuppose that. I don't believe that is
14:09:36	25	the case.

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14:09:36	1	Q. Have you gone back to study any
14:09:46	2	of the overall responses from respondents
14:09:48	3	that checked completely undesirable or
14:09:53	4	undesirable for any of these features?
14:09:55	5	A. I have not done as part of this
14:09:57	6	report. But as I said, the data is
14:10:00	7	available. It can be done.
14:10:09	8	Q. By the way, did you at any point
14:10:11	9	calculate MVAI for either of the features
14:10:13	10	that you were studying here without the
14:10:15	11	constraints that we discussed earlier today?
14:10:18	12	A. I have not done it as part of
14:10:22	13	this report, but it's something we have,
14:10:24	14	can be done.
14:10:24	15	Q. Did you mention anywhere in your
14:10:26	16	report that you had imposed those
14:10:28	17	constraints on the analysis?
14:10:32	18	A. Again, I did not mention it
14:10:35	19	explicitly in the report. These are
14:10:37	20	standard procedures, logical sequence, I did
14:10:39	21	not mention it in my report.
14:10:40	22	Q. Let's look at page 11, which
14:10:45	23	talks about MVAI. Your report indicates
14:10:55	24	that MVAI is also referred to as the
14:10:58	25	willingness to pay price, right?

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14:11:02	1	A. Yes.
14:11:02	2	Q. Is that sometimes abbreviated
14:11:06	3	WTP?
14:11:09	4	A. Yes, some people abbreviate it
14:11:11	5	as WTP. I've chosen the word market,
14:11:18	6	market's value of attribute importance
14:11:20	7	because it is more reflective, sorry,
14:11:25	8	market's value for the improvement of the
14:11:27	9	feature because it's reflective of the
14:11:30	10	attribute feature improvement.
14:11:32	11	Q. You list here five steps for
14:11:46	12	computing the MVAI; is that right?
14:11:49	13	A. That's correct.
14:12:08	14	Q. Were these steps carried out by
14:12:11	15	a person, by a computer, or something else?
14:12:15	16	A. They're carried out in the Excel
14:12:17	17	spreadsheet that was provided.
14:12:33	18	MS. THAYER: Let's mark as the
14:12:34	19	next exhibit in order a spreadsheet
14:12:38	20	that has Bates number
14:12:45	21	MOTM_WASH1823_0603683.
14:12:48	22	(PX Exhibit 351 for
14:12:48	23	identification, Bates stamped
14:13:17	24	MOTM_WASH1823_0603683.)
14:13:17	25	Q. You just made reference to an

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14:13:18	1	Excel spreadsheet. Is this the document
14:13:24	2	where the MVAI calculation was carried out?
14:13:27	3	A. That's correct.
14:13:28	4	Q. What does MWTP value stand for?
14:13:48	5	A. The WTP is willingness to pay.
14:13:51	6	M is the market's willingness to pay. And
14:13:54	7	that's what's being used there. So MVAI,
14:13:57	8	MWTP is interchangeably used out there.
14:14:02	9	Q. What market are you referring to
14:14:03	10	when you say market's willingness to pay?
14:14:05	11	A. It's the market represented by
14:14:09	12	these 499 or 561 respondents that were, that
14:14:20	13	met the criteria in the survey to
14:14:22	14	participate in this conjoint exercise.
14:14:26	15	Q. I'm correct that to meet those
14:14:29	16	criteria a respondent had to own an Xbox but
14:14:33	17	did not have to use it; is that right?
14:14:35	18	A. It's -- I just want to go back
14:14:42	19	and make sure. There were questions that
14:14:44	20	were asked about whether they owned it or
14:14:47	21	whether they made a purchase and whether
14:14:50	22	they used it as well. So there was -- there
14:14:53	23	were different questions that looked at
14:14:56	24	ownership and their role in making the
14:14:58	25	decision.

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14:14:58	1	Q. Well could you please -- I do
14:15:02	2	need an accurate answer to this question.
14:15:06	3	Would a person such as myself who owns an
14:15:11	4	Xbox but has never used it qualify for
14:15:16	5	either or both of these surveys, or would I
14:15:19	6	be screened out because I don't use it?
14:15:23	7	A. Let me confirm that for you.
14:15:27	8	Okay?
14:15:27	9	Q. Thank you.
14:15:52	10	A. So if you owned and you were not
14:15:59	11	responsible for the purchase, you would be
14:16:04	12	screened out. If you did not own you would
14:16:10	13	be screened out. So you should have in some
14:16:17	14	manner owned it and said either one, two or
14:16:23	15	three of question QA9 of Exhibit 338, page 8
14:16:31	16	of Exhibit A of my report and you would be
14:16:38	17	eligible to participate in the survey.
14:16:39	18	Q. So I am somebody that bought an
14:16:43	19	Xbox, I own it, it's in my house, but I've
14:16:46	20	never used it. Do I qualify for your
14:16:49	21	surveys or not?
14:16:49	22	A. If you answered I did not
14:16:51	23	purchase it, or you were not responsible for
14:16:53	24	purchasing it, you would not qualify for my
14:16:57	25	survey.

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14:16:57	1	Q. That's not what my question was.
14:16:59	2	I owned it, I purchased it, I was the only
14:17:03	3	one involved in purchasing it, but I have
14:17:05	4	never used it. Would I qualify for your
14:17:08	5	surveys?
14:17:08	6	A. Now in that question, yes.
14:17:10	7	Q. Okay. My teenage son who uses
14:17:19	8	the Xbox in my house was not responsible for
14:17:26	9	purchasing the Xbox and he does not own it.
14:17:28	10	Would he qualify for your survey?
14:17:30	11	A. If he had said -- if he had said
14:17:47	12	he did not own it, he would not qualify -- I
14:17:51	13	want to make sure I clarify this before I --
14:17:59	14	if he -- if he had said he does not own a
14:18:03	15	Microsoft Xbox, he would not be included as
14:18:14	16	part of the survey.
14:18:15	17	Q. In the Authentic Response panel
14:18:19	18	are there any minors?
14:18:22	19	A. Minors below -- minors are
14:18:32	20	generally allowed to participate in surveys
14:18:36	21	only with the consent of their parents. And
14:18:39	22	I need to go back and look at exactly
14:18:44	23	Authentic Response's policy or what they
14:18:49	24	have in their panel. I don't remember from
14:18:58	25	-- I don't remember it from memory.

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14:18:59	1	Q. For purposes of your surveys,
14:19:20	2	what was the relevant universe?
14:19:25	3	A. Sorry, for -- so let me answer
14:19:33	4	this question as for the purposes of our
14:19:37	5	survey, the universe included, you know,
14:19:47	6	gender was not the issue. Anybody born
14:19:54	7	between 1995, inclusive of 1995, and before
14:20:01	8	was included in the survey. Anyone born
14:20:06	9	after -- sorry, anyone born after 1996, 1996
14:20:10	10	and -- 1996 and before were included in the
14:20:13	11	survey. Anybody born after 1996 were not
14:20:18	12	included in the survey.
14:20:20	13	And then the universe to whom
14:20:24	14	the survey was mailed out to included, was
14:20:29	15	representative of the US population. And
14:20:33	16	those that did complete the survey were
14:20:35	17	those who owned an Xbox and then met the
14:20:39	18	criteria for being, of having answered QA9
14:20:45	19	here in this exhibit, the criteria for
14:20:48	20	having made the decision or been involved in
14:20:50	21	the decision.
14:20:50	22	Q. But setting aside the panel that
14:20:53	23	you selected respondents from or that
14:20:57	24	Authentic Response obtained respondents
14:21:00	25	from, what did you think was the relevant

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14:21:03	1	universe for purposes of testing or
14:21:10	2	answering the question what is the MVAI of
14:21:13	3	H.264 standard in the Xbox?
14:21:20	4	MS. HOANG: Objection; form.
14:21:22	5	A. The universe there was those who
14:21:27	6	owned and who answered two, which is they
14:21:34	7	own an Xbox recently, at least own an Xbox,
14:21:38	8	Microsoft Xbox, answer of two, item 2 here
14:21:43	9	on QA8.
14:21:44	10	And those who on QA9 identified
14:21:49	11	themselves as being either solely
14:21:51	12	responsible for the purpose -- for the
14:21:53	13	purchase, primarily responsible but some
14:21:57	14	other member was also involved, some other
14:21:59	15	family member was also involved, or another
14:22:02	16	family member had primary responsibility but
14:22:06	17	they were involved in the purchase.
14:22:08	18	So that was, you know, Microsoft
14:22:11	19	Xbox ownership was one, and then involvement
14:22:16	20	in the purchase was a second criteria.
14:22:18	21	Q. Why did your universe not
14:22:22	22	include individuals who were considering in
14:22:25	23	the near term purchasing an Xbox?
14:22:27	24	A. We did not include them. We
14:22:46	25	wanted to make -- you know, we wanted to

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14:22:48	1	make sure that these are individuals who had
14:22:51	2	gone through the purchase of an Xbox and as
14:22:55	3	a result, we didn't feel it was important to
14:22:58	4	include those who were considering the
14:22:59	5	purchase of an Xbox.
14:23:02	6	Q. Was it because you were only
14:23:09	7	interested in some historical MVAI rather
14:23:12	8	than current or future MVAI?
14:23:17	9	MS. HOANG: Objection; form.
14:23:19	10	A. No, that was not the case here.
14:23:21	11	Q. So I'm trying to understand why
14:23:23	12	the views of a consumer who, for example,
14:23:29	13	had a Wii or a PlayStation and was thinking
14:23:33	14	about getting an Xbox, why was that section
14:23:41	15	of the population not relevant to your
14:23:43	16	research?
14:23:48	17	A. The purpose was, was people who
14:23:49	18	have owned and been involved in the purchase
14:23:52	19	decision of an Xbox, that was the primary
14:23:55	20	objective. And we -- the choices would be
14:24:00	21	relevant to them, the choices that were
14:24:03	22	presented to them in the choice based
14:24:05	23	conjoint would be relevant to them, and we
14:24:08	24	wanted to -- it's clear that the choice
14:24:11	25	based conjoint looks at in the process of

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14:24:14	1	making those choices how much emphasis did
14:24:17	2	they place on one attribute or another
14:24:20	3	attribute.
14:24:20	4	To include someone who is in the
14:24:23	5	consideration -- is considering but hasn't
14:24:25	6	made a purchase would involve other things
14:24:30	7	that we don't know if they're actually
14:24:33	8	considering or not considering. We don't
14:24:35	9	know what aspects they might consider, so we
14:24:38	10	didn't find it the relevant universe to
14:24:41	11	survey.
14:24:42	12	Q. Why did you not further screen
14:24:58	13	respondents to ensure that they actually
14:25:07	14	used the Xbox, didn't just purchase it, but
14:25:11	15	actually used it and therefore were familiar
14:25:14	16	with these features?
14:25:14	17	A. Well, we have people who owned
14:25:17	18	it and those who are involved in the
14:25:20	19	purchase decision. So, you know, use comes
14:25:24	20	after the purchase. When you're making the
14:25:27	21	purchase, you're making the tradeoffs
14:25:30	22	between the various attributes that are
14:25:33	23	presented to you. And that reality is
14:25:35	24	captured in the survey.
14:25:36	25	So you want to have people who

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14:25:38	1	are involved in the purchase, not people,
14:25:40	2	not just people who have used the product.
14:25:45	3	They may have used it at a friend's house,
14:25:47	4	they may have used it elsewhere. For us it
14:25:52	5	is important that they be involved in the
14:25:53	6	purchase process.
14:25:54	7	Q. Well why wasn't it important for
14:25:56	8	you then to further screen and ensure that
14:25:59	9	you were administering the survey to
14:26:06	10	individuals who used the Xbox?
14:26:08	11	A. You know, as I mentioned, the
14:26:13	12	choices are made at the time of purchase.
14:26:16	13	Use happens after the purchase is made. So
14:26:18	14	it's important to see what's happening at
14:26:20	15	the choice process and that's really what
14:26:22	16	we're capturing out here.
14:26:24	17	There is data here -- yes.
14:26:43	18	Q. You excluded, did you not,
14:26:45	19	anyone from the survey who did not connect
14:26:50	20	to the internet; is that right?
14:27:13	21	A. Yes, that's correct.
14:27:34	22	Q. On page 12 of your report under
14:27:36	23	usage, you indicate that the results, excuse
14:27:39	24	me, you state that "the survey results
14:27:41	25	indicate that 100 percent of Xbox users have

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14:27:44	1	connected to the internet using at least one
14:27:46	2	of the options presented."
14:27:53	3	Given that you excluded from the
14:27:54	4	survey individuals who had not connected to
14:27:56	5	the internet, why was that a relevant
14:28:00	6	finding to put in your report?
14:28:08	7	A. Well, it was relevant to
14:28:10	8	describe the respondents here, only those
14:28:19	9	that did connect to the internet, and that
14:28:25	10	how they connected to the internet is what
14:28:27	11	is being described in the table in table 12.
14:28:31	12	Q. Well, isn't it a little bit,
14:28:34	13	that sentence a little bit misleading to say
14:28:37	14	that a hundred percent of Xbox users have
14:28:40	15	connected to the internet using at least one
14:28:42	16	of the options presented, when you didn't
14:28:46	17	actually survey all Xbox users, in fact, you
14:28:51	18	only surveyed Xbox owners and you excluded
14:28:55	19	any owner who had never connected to the
14:28:58	20	internet?
14:28:58	21	A. It could be misleading, that's
14:29:00	22	correct.
14:29:00	23	Q. Okay. So all you were meaning
14:29:02	24	to say by that sentence was that you had
14:29:06	25	screened out --

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14:29:08	1	A. That's correct.
14:29:08	2	Q. -- anyone who didn't connect and
14:29:11	3	these were the three different ways that one
14:29:12	4	could connect and your survey shows how
14:29:16	5	frequently your sample -- strike that. This
14:29:21	6	table 12 shows of the people that connected,
14:29:26	7	the users that connected to the internet
14:29:30	8	which method was used most frequently, is
14:29:34	9	that fair?
14:29:35	10	MS. HOANG: Objection; form.
14:29:36	11	A. So the first column is how they
14:29:39	12	connected of those who connected to the
14:29:41	13	internet, and the second column is what they
14:29:43	14	used more frequently to connect.
14:29:46	15	Q. Did you find out with respect to
14:29:55	16	Wi-Fi how much the average user used Wi-Fi,
14:30:04	17	or did you simply for your population
14:30:07	18	determine which method of connection was
14:30:14	19	most frequently used?
14:30:17	20	A. Can you repeat that question for
14:30:19	21	me.
14:30:20	22	Q. Let me strike that. We've got
14:30:24	23	five minutes, we can do this in five
14:30:27	24	minutes.
14:30:27	25	Could you explain to me, this

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14:30:28	1	column that says connectivity, what does
14:30:30	2	that data represent?
14:30:31	3	A. That data represents the
14:30:37	4	question that was asked of them, off of them
14:30:40	5	as to how they connected, when connecting to
14:30:45	6	the internet, how they connected to the
14:30:47	7	internet. 52.6 percent, and you can see
14:30:50	8	they don't sum up to a hundred percent
14:30:52	9	because they were allowed to check more than
14:30:54	10	one, 52.6 percent said they connected using
14:30:59	11	a hard wired connection, 44.5 percent said
14:31:04	12	Wi-Fi, and then 38.5 percent said they
14:31:08	13	connected using an external Wi-Fi network
14:31:11	14	adapter.
14:31:12	15	And then the second column there
14:31:15	16	pertains to the same, to the question that I
14:31:17	17	asked them, what was the method used most
14:31:24	18	often. Yes. So if they picked, they picked
14:31:34	19	two or more, then they were asked to
14:31:37	20	indicate which one they picked the most
14:31:39	21	often.
14:31:39	22	Q. And finally, does any of your
14:31:41	23	data show the frequency with which
14:31:49	24	respondents connected to the internet, for
14:32:00	25	example, once a week, once a day, once a

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14:32:05	1	year?
14:32:15	2	A. No, it does not ask that
14:32:16	3	question.
14:32:31	4	MS. THAYER: Let's take another
14:32:32	5	break here. We are making lots of
14:32:34	6	progress, but we do need to change the
14:32:36	7	tape.
14:32:36	8	THE VIDEOGRAPHER: Thank you.
14:32:37	9	One moment, please, watch your
14:32:39	10	microphones. Here now marks the end
14:32:41	11	of tape 4 of the deposition of Dr. R.
14:32:44	12	Sukumar. The time is 2:32 p.m., we
14:32:46	13	are off the record.
14:32:49	14	(A recess was taken.)
14:45:10	15	THE VIDEOGRAPHER: Here now
14:45:24	16	marks the beginning of tape 5 of the
14:45:26	17	deposition of Dr. R. Sukumar. The
14:45:28	18	time is 2:45 p.m., we're back on the
14:45:31	19	record.
14:45:32	20	Q. I have a few more questions on
14:45:34	21	page 11 of your report where the MVAI
14:45:38	22	calculations are described. Step 1 refers
14:45:44	23	to computing the utility function for the
14:45:48	24	sample of respondents. Do you see that?
14:45:49	25	A. Yes.

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14:45:50	1	Q. It goes on to say "The utility
14:45:52	2	function is an equation," etc.?
14:45:55	3	A. Yes.
14:45:56	4	Q. Is there any document that you
14:45:57	5	can point to that would show me what that
14:46:00	6	equation is?
14:46:01	7	A. I believe the CBC/HB manual, so
14:46:14	8	this is a Sawtooth Software CBC/HB manual
14:46:19	9	that describes what the model of the
14:46:21	10	equation is that is used.
14:46:32	11	Q. Is there only one equation that
14:46:37	12	is available to be used in that software?
14:46:43	13	A. Well --
14:46:46	14	Q. Or are there choices to be made?
14:46:47	15	A. No, there's -- there's only one
14:46:53	16	equation to be used. That's -- that's
14:46:55	17	basically the model itself is driven by
14:46:58	18	that.
14:46:58	19	Q. Where, if at all, in Exhibit
14:47:09	20	351, could I find the computation of the
14:47:11	21	utility functions for the sample of
14:47:13	22	respondents?
14:47:14	23	A. Sure. So I'm on Exhibit 351.
14:47:27	24	If you look at page 3 and on, starting with
14:47:34	25	the column that reads, Wi-Fi on the top,

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14:47:39	1	Wi-Fi threshold, under Wi-Fi threshold you
14:47:42	2	have four columns, under hard driver you
14:47:45	3	have four columns. So the utility function
14:47:48	4	for respondent number 1308 is, consists of a
14:47:55	5	coefficient, so for Wi-Fi capability across
14:48:00	6	those four levels, a hard drive across those
14:48:03	7	four levels. So if you wanted to see what
14:48:07	8	is the probability that respondent number
14:48:10	9	1308 would choose a product comprising of
14:48:18	10	built-in Wi-Fi capability with B/G/N, B/G/N
14:48:25	11	networks, a 250 gigabyte hard drive, HDMI
14:48:29	12	port being present, at a price point, you
14:48:31	13	know, pick a number, let's say $499.99 and
14:48:36	14	one controller and so on, you would
14:48:38	15	essentially be looking at an algebraic
14:48:41	16	function that is first a sum of these
14:48:44	17	numbers represented by the coefficients.
14:48:49	18	And that would be the total
14:48:53	19	utility function for that product and then
14:48:54	20	it goes to the equation.
14:49:07	21	Q. Step 2 says "to compute the
14:49:09	22	average utilities across the sample." Are
14:49:12	23	those the average utilities reflected in
14:49:15	24	Exhibit 351?
14:49:20	25	A. In Exhibit 351, again, on page

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14:49:22	1	3, at the top you see the word average and
14:49:25	2	then you will see averages computed all
14:49:28	3	throughout.
14:49:34	4	Q. And that row reflects average
14:49:36	5	utilities?
14:49:36	6	A. Correct.
14:49:37	7	Q. Step 3 is to compute the utility
14:49:43	8	difference across the improvements levels.
14:49:46	9	Where is that computation reflected?
14:49:50	10	A. It's also reflected in the
14:49:53	11	spreadsheet and I want to go to page 4, for
14:49:57	12	example, you will now see that the average
14:50:02	13	utilities are being scaled upwards for
14:50:06	14	price. The highest price point, which is
14:50:09	15	499, is now at a utility of zero. The
14:50:14	16	lowest price point, which is $99.99, or a
14:50:19	17	value of $400, has a number on the top of 3
14:50:25	18	point -- I can't read with my glasses. This
14:50:28	19	is small. I want to say 3.648. But you can
14:50:33	20	clearly see that now.
14:50:36	21	And if you go to the next
14:50:38	22	attribute, Wi-Fi capability, the same is
14:50:42	23	done except it's truncated out here. The
14:50:46	24	utilities are shown from zero, which is for
14:50:50	25	the lowest attribute, to a high -- to a

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14:50:52	1	number that is on the upper end, a number
14:50:58	2	for the improvements for each level of the
14:51:02	3	attribute.
14:51:08	4	Q. So I'm sorry, why is it that
14:51:10	5	average on page 4, that line, reflects
14:51:12	6	utility difference whereas average on page 3
14:51:17	7	reflects average utilities?
14:51:19	8	A. So again, as stated in the
14:51:25	9	CBC/HB manual, what you have here are part
14:51:31	10	worth utilities that they sum up to a zero.
14:51:33	11	So if you take any one attribute, the sum of
14:51:35	12	these values is a zero.
14:51:37	13	So you take the average of
14:51:39	14	these, which is what you see on page 3 of
14:51:43	15	this document and then now to look at it in
14:51:48	16	the form of an improvement what you're doing
14:51:50	17	is you're rescaling these. Rescaling means
14:51:53	18	you're adding the largest, the smallest
14:51:59	19	number, in this case the largest negative
14:52:01	20	number, you're adding that to everything and
14:52:03	21	so now you're looking at it as zero to some
14:52:07	22	large number and that's what that is
14:52:11	23	reflective of on page 4.
14:52:12	24	Q. Thank you, I'm following that
14:52:14	25	now, thank you.

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14:52:15	1	Step 4 says "to compute the
14:52:17	2	utility per dollar from the price utility
14:52:19	3	function." What is the price utility
14:52:22	4	function?
14:52:22	5	A. Yes, so this is on page 4, and I
14:52:26	6	kind of jumped a step here. On page 4 you
14:52:29	7	can see -- and some of this may not be in
14:52:37	8	here because what you're doing out here, the
14:52:40	9	utility for the dollar, you are, when you
14:52:46	10	re-scale it from zero to -- so the highest
14:52:50	11	price point had a negative value, and now
14:52:55	12	you have rescaled it from there to the $99,
14:52:58	13	so you've kind of changed the price scale to
14:53:00	14	a value scale. And you can then use that
14:53:04	15	scale to reflect the, if you take -- you can
14:53:09	16	use that price curve along with the curve
14:53:13	17	for any attribute to convert the utilities
14:53:16	18	for the attribute in a -- onto a price
14:53:21	19	scale.
14:53:21	20	And that's what's happening in
14:53:22	21	that step, step 4 and step 5 I reflect that.
14:53:26	22	Q. But are they reflected in the
14:53:28	23	document that I have here, this conversion?
14:53:31	24	A. It's not printed and not visible
14:53:33	25	here. It goes from here to you'd have to go

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14:53:37	1	through the steps that are -- if you kept
14:53:39	2	your function keys on there you can see
14:53:42	3	where it takes it from over there to convert
14:53:44	4	it to what is on page 1, on the top here on
14:53:51	5	page 1. This is where the different
14:53:56	6	features are now being converted by taking
14:53:58	7	those ratios between the utility curve and
14:54:02	8	the price curve, I mean the utility for the
14:54:04	9	attribute curve versus the price utility
14:54:07	10	curve, those then get converted here into
14:54:09	11	price numbers. You can see that right there
14:54:13	12	at the top of Exhibit 351, page 1.
14:54:20	13	Q. So the result of step 5 is
14:54:31	14	what's reflected on page 1 of Exhibit 351?
14:54:34	15	A. Correct. The result of steps,
14:54:38	16	step 5 is reflected right there, yes.
14:54:40	17	Q. I believe your report has
14:55:18	18	several references cited in Exhibit E. Do
14:55:21	19	you recall that?
14:55:45	20	A. That's correct.
14:55:45	21	Q. Reference 3 is the article "How
14:55:48	22	much does the market value an improvement in
14:55:51	23	a product attribute"; is that right?
14:55:53	24	A. That's correct.
14:55:54	25	Q. And you cite that on page 3 of

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14:55:59	1	your report, section 2, paragraph 1?
14:56:29	2	MS. THAYER: Counsel, I believed
14:56:30	3	I may start bumping up into exhibit
14:56:33	4	numbers being used in another
14:56:35	5	deposition today, so with your
14:56:37	6	permission, I just have a question, a
14:56:38	7	simple question I think about this
14:56:39	8	article. I have it here but I'd just
14:56:42	9	as soon not mark it as an exhibit
14:56:44	10	unless you feel strongly about it.
14:56:46	11	MS. HOANG: Well let's see. I
14:56:47	12	do that all the time. So maybe you
14:56:51	13	can mark it PX 1000 or something.
14:56:56	14	MS. THAYER: We'll see if we
14:56:58	15	need to.
14:56:58	16	Q. I just wanted to have it
14:56:59	17	available because I have been asking lots of
14:57:01	18	questions here, detailed questions. I
14:57:03	19	wanted to ask you to what extent, if any,
14:57:07	20	have you utilized any equation or
14:57:13	21	methodology that's laid out in this article
14:57:18	22	in this particular study?
14:57:19	23	A. Well, the methodology that is
14:57:31	24	used is described in, you know, is described
14:57:47	25	here in sections 3.2, 3.3. The approach in

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14:57:54 1 terms of the fact that you're taking the
14:57:59 2 ratio off the average utility for an
14:58:08 3 attribute improvement to the average utility
14:58:11 4 for the price function, those are described
14:58:16 5 here and those have been used from, from
14:58:23 6 this particular paper.
14:58:23 7   Q.   Are there any differences
14:58:24 8 between the approach that is described in
14:58:29 9 this paper and the approach that you have
14:58:32 10 used in your report?
14:58:34 11   A.   The general approach is similar
14:58:39 12 to what's described out here.
14:58:42 13   Q.   Are there any differences so far
14:58:43 14 as you know?
14:58:44 15   A.   Not as far as I know.
14:58:45 16   Q.   So has the Sawtooth Software
14:59:01 17 that you have used, to your knowledge,
14:59:03 18 simply implemented the approach that is laid
14:59:11 19 out in this article?
14:59:16 20   A.   So the Sawtooth Software is
14:59:18 21 responsible for collecting the data on how
14:59:21 22 people made the choices. It is also
14:59:24 23 responsible for doing, getting the part
14:59:27 24 worth utilities.
14:59:28 25   What this paper is describing

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14:59:32 1 has to do more with the calculation of the
14:59:35 2 MVAI and that's where I want to clarify what
14:59:40 3 you just asked.
14:59:40 4   Q.   All right. I appreciate that
14:59:42 5 clarification. So the MVAIs that are
14:59:49 6 reflected in Exhibit 351, is that something
14:59:51 7 that was done by a different piece of
14:59:54 8 software? Was that done by hand and entered
14:59:56 9 into the spreadsheet?
14:59:57 10   A.   Those are Microsoft Excel
14:59:59 11 calculations.
15:00:04 12   Q.   I'm not quite clear because as I
15:00:11 13 read through this article, there's a whole,
15:00:17 14 a large number of equations that they talk
15:00:20 15 about and are you saying that all of that
15:00:22 16 calculation is done within an Excel
15:00:28 17 spreadsheet?
15:00:29 18   A.   So this article has to do both
15:00:32 19 with the theory and the application of it.
15:00:34 20 The application is represented in one
15:00:36 21 equation. The buildup as to the
15:00:40 22 step-by-step as to how did they derive this
15:00:43 23 ratio and the average and the ratios to be
15:00:46 24 taken, that's what the rest of the paper is.
15:00:50 25   So the crux of what we needed to

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15:00:53 1 be used here is based on that section 3.3
15:00:58 2 that I mentioned.
15:00:59 3   Q.   Okay. So if you could just turn
15:01:04 4 to that and make sure that I have it right,
15:01:06 5 to page 403, section 3.3, calculating market
15:01:10 6 value, etc.
15:01:13 7   A.   That's correct.
15:01:13 8   Q.   So the equation 14 is the one
15:01:23 9 that you implemented to create, for example,
15:01:31 10 page 1 of Exhibit 351?
15:01:33 11   A.   That's correct.
15:01:33 12   Q.   Thank you.
15:01:37 13   MS. HOANG: Could I ask you to
15:01:38 14   just at least read the Bates numbers
15:01:40 15   in so that there isn't any confusion
15:01:42 16   later.
15:01:43 17   MS. THAYER: No problem. The
15:01:45 18   name of the article, it's reference 3
15:01:46 19   in the reports, "How much does the
15:01:48 20   market value and an improvement in a
15:01:50 21   product attribute?" Bates numbers end
15:01:53 22   in 0603524 through 0603537. Thanks,
15:02:00 23   that's a good compromise.
15:02:18 24   Q.   Now your report states that you
15:02:35 25 began your work "by conducting an online

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15:02:38 1 survey," I'm reading at the bottom of page
15:02:42 2 3, "of a group of respondents, constituting
15:02:45 3 a sample of the target population of users
15:02:48 4 of the product at issue (here, the Xbox
15:02:50 5 Console)."
15:02:51 6   Do you see that?
15:02:51 7   A.   That's correct.
15:03:02 8   Q.   So is your report incorrect in
15:03:04 9 the way that it has characterized the target
15:03:09 10 population?
15:03:10 11   A.   Again, if you recall, it is
15:03:20 12 using the word users and own an Xbox Console
15:03:25 13 interchangeably, so the specific, the
15:03:31 14 specifications of exactly who was recruited
15:03:34 15 are in the survey itself and the data given
15:03:38 16 by the survey.
15:03:39 17   So you're right in that sense,
15:03:42 18 the word users is being interchangeably
15:03:44 19 used.
15:03:44 20   Q.   Now, invitations were sent to
15:04:03 21 the Authentic Response panel; is that right?
15:04:06 22   A.   That's correct.
15:04:06 23   Q.   Does that panel represent a
15:04:16 24 random sample of the US population?
15:04:19 25   A.   The panel is representative of

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15:04:26	1	the US population from which, so it acts as
15:04:30	2	a sampling frame from which we randomly
15:04:34	3	select individuals who are invited to
15:04:39	4	participate in the survey.
15:04:40	5	Q. Well actually, you didn't
15:04:51	6	select, did you? The individuals who got
15:04:56	7	the invitations self-selected, did they not?
15:05:00	8	A. Authentic Response randomly
15:05:02	9	identifies individuals within the various
15:05:09	10	stratifications of the US Census and sends
15:05:12	11	them an invitation to participate. They
15:05:18	12	then self-select and decide to participate
15:05:21	13	or not, but the out-go of invitations is a
15:05:28	14	random, randomly selected from the 4 million
15:05:31	15	households that Authentic Response maintains
15:05:35	16	in its database.
15:05:35	17	Q. So did you do any research to
15:05:40	18	determine whether the self-selection that
15:05:44	19	occurred when panelists decided to respond
15:05:47	20	or not to respond to the invitation,
15:05:50	21	introduced any bias into the sample?
15:05:52	22	A. Okay, so can I ask you to
15:05:56	23	rephrase that question because you've got --
15:05:57	24	it's got multiple parts there. It would
15:06:00	25	help me answer it more appropriately,

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15:06:03	1	please.
15:06:19	2	MS. THAYER: Could you read it
15:06:20	3	back.
15:06:20	4	(Record read as requested.)
15:06:21	5	A. I did not do any specific
15:06:23	6	research of those who did not respond to
15:06:30	7	compare them to those who did respond. But
15:06:34	8	the sample itself is so large and the
15:06:37	9	population from which it is drawn, the
15:06:41	10	Authentic Response panel is so large, that
15:06:45	11	that should not be an issue.
15:06:48	12	Additionally, Authentic Response
15:06:50	13	does a large number of these surveys, and
15:06:54	14	there are other companies that maintain and
15:06:56	15	manage panels like this. So I would not
15:06:58	16	expect to see that sort of a nonresponse
15:07:01	17	bias emerging from there.
15:07:03	18	Q. Would you characterize your
15:07:06	19	sample of 499 respondents in the H.264
15:07:34	20	survey, would you characterize that as a
15:07:36	21	random sample?
15:07:40	22	A. I would characterize that as a
15:07:42	23	random -- I would characterize the
15:07:45	24	invitations that went out as being a random
15:07:48	25	sample. And as a consequence of that, the

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15:07:53	1	people who participated in the survey would
15:07:55	2	be a random sample, who took the H.264
15:08:02	3	survey all the way to the end would be
15:08:04	4	characterized as being a random sample.
15:08:07	5	Q. So in your expert opinion, the
15:08:10	6	499 individuals that responded to the H.264
15:08:16	7	survey constitutes a random sample of Xbox
15:08:23	8	owners?
15:08:25	9	A. Yes.
15:08:25	10	Q. Do the 561 individuals who
15:08:32	11	responded to the 802.11 survey constitute a
15:08:38	12	random sample of Xbox owners in your expert
15:08:42	13	opinion?
15:08:42	14	A. Yes.
15:08:42	15	Q. Are they probability samples?
15:08:57	16	A. They are probability samples
15:09:01	17	within the stratification that represented
15:09:06	18	the various US Census demographic variables.
15:09:10	19	Q. Are they probability samples of
15:09:17	20	Xbox owners?
15:09:18	21	A. As a consequence of what was
15:09:21	22	sent out, because again, you know, the
15:09:23	23	surveys were sent out, those were
15:09:26	24	probability sample. As a consequence of
15:09:29	25	that, the Xbox owners would also be a

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15:09:33	1	probability sample.
15:09:34	2	Q. What do you mean by the surveys
15:09:38	3	were sent out?
15:09:39	4	A. So Authentic Response had a
15:09:42	5	database of 4 million households. We
15:09:45	6	instructed them to randomly send out surveys
15:09:49	7	that were so distributed to represent the US
15:09:55	8	Census.
15:09:55	9	So let's take males represented
15:09:59	10	in the US Census, that would be a
15:10:01	11	stratification. And they randomly sent it
15:10:04	12	out to the males that were classified in the
15:10:07	13	database and so on.
15:10:08	14	And that's what I mean by a
15:10:10	15	probability sample.
15:10:16	16	Q. Is the population of Xbox users
15:10:21	17	distributed in the same way as the US Census
15:10:24	18	is?
15:10:25	19	A. No.
15:10:28	20	Q. Is the population of Xbox owners
15:10:32	21	distributed in the same manner as the US
15:10:35	22	Census is?
15:10:35	23	A. I'm not aware and I don't know.
15:10:40	24	It also doesn't matter for me because what I
15:10:42	25	did do is the population of -- the sampling

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15:10:47	1	frame, anybody who responded to the survey,
15:10:50	2	was distributed to the US Census. And
15:10:54	3	therefore, it represented the broader
15:10:57	4	marketplace and those who represented the
15:11:01	5	Xbox 360 would automatically reflect -- I'm
15:11:05	6	sorry, those who represented the Xbox would
15:11:08	7	automatically reflect a random sample.
15:11:13	8	Q. But with an artificial age
15:11:19	9	cutoff, correct?
15:11:20	10	A. That's correct.
15:11:20	11	Q. Who suggested the age cutoff
15:11:38	12	that you applied in your survey?
15:11:40	13	A. Well, the -- there are certain
15:11:50	14	policies in the -- and certain rules in
15:11:55	15	terms of who you can do surveys with and how
15:11:59	16	you do surveys with, the people who are
15:12:01	17	below 18, and it was reflective of that.
15:12:05	18	I mean you -- the distribution
15:12:12	19	of -- in the panel itself, you may have
15:12:17	20	people of different age groups, but who can
15:12:21	21	or cannot take, that is reflective in a
15:12:23	22	regulatory -- in a trade association ESOMAR
15:12:27	23	or CASRO and that is typically managed by my
15:12:31	24	field team.
15:12:35	25	Q. So are you saying you had an age

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15:12:36	1	cutoff because of some regulation?
15:12:38	2	A. You can't have an eight year old
15:12:41	3	or a ten year old complete a survey.
15:12:43	4	Q. How about an 11 year old?
15:12:45	5	A. If -- 11 year old cannot be --
15:12:56	6	cannot complete a survey without the written
15:13:01	7	permission of their parents. That's my
15:13:03	8	understanding, okay.
15:13:04	9	Q. What about a 12 year old?
15:13:11	10	MS. HOANG: Objection; form.
15:13:12	11	A. I can't recall exactly what that
15:13:14	12	cutoff is, but it's somewhere, it falls in
15:13:17	13	that area.
15:13:17	14	Q. Did you have the age cutoff
15:13:20	15	because it was administratively awkward or
15:13:24	16	because you made a professional
15:13:27	17	determination that the views of somebody
15:13:29	18	younger than 16 were not relevant to your
15:13:35	19	survey?
15:13:37	20	A. The age cutoff was meant to
15:13:43	21	reflect more the fact that there are certain
15:13:47	22	guidelines in terms of who you can or cannot
15:13:50	23	survey in the presence or absence of the
15:13:56	24	family member.
15:13:57	25	So we wanted to make sure --

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15:13:59	1	that coupled with the fact that we also
15:14:01	2	wanted to make sure that the people
15:14:03	3	participating in the survey are reflective
15:14:05	4	of those who own an Xbox and have had an
15:14:12	5	influence in the purchasing process.
15:14:14	6	Q. Did you conclude that a male age
15:14:17	7	15 would not be likely to have participated
15:14:22	8	in the purchasing decision for the Xbox in
15:14:25	9	his household?
15:14:26	10	A. And what do you mean by that?
15:14:30	11	In what sense are you asking that question?
15:14:31	12	Q. Well, you, in responding to my
15:14:34	13	questions about why certain age groups were
15:14:37	14	excluded from taking the survey, you
15:14:41	15	mentioned that you had this criterion that
15:14:45	16	you wanted to make sure that the individuals
15:14:46	17	who responded had some involvement in the
15:14:49	18	purchasing decision, and I'm following up on
15:14:51	19	your testimony to say did you assume that a
15:14:55	20	15 year old boy, for example, would not
15:14:58	21	normally participate in the decision to
15:15:02	22	purchase the Xbox for his household?
15:15:06	23	MS. HOANG: Objection; form.
15:15:07	24	A. No, I don't think we made that
15:15:11	25	decision. As I said, it was partly driven

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15:15:14	1	by the fact that when you go below a certain
15:15:17	2	age, parental consent, consent is required
15:15:25	3	and that's why the cutoffs were set up the
15:15:28	4	way they were cut off -- the way they were
15:15:31	5	set up.
15:15:31	6	Q. Is it possible to do a survey
15:15:35	7	that, an online survey where consents have
15:15:43	8	to be obtained for minors? Do you know one
15:15:45	9	way or the other?
15:15:46	10	A. I don't know.
15:15:47	11	Q. Have you ever done such a
15:15:49	12	survey?
15:15:50	13	A. I believe our company has done
15:15:53	14	that, again, in the area of video games, and
15:15:56	15	I don't --
15:15:57	16	Q. I was going to ask you just
15:15:58	17	about that because most of the people I know
15:16:00	18	that play video games are 14 and 15 year old
15:16:03	19	boys.
15:16:03	20	A. Correct. So again, this gets
15:16:05	21	into a lot of operational things that my
15:16:09	22	company's people were knowledgeable and who
15:16:13	23	manage those operational details with
15:16:15	24	companies like Authentic Response.
15:16:17	25	Q. What was done, if anything, to

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15:16:22 1   determine whether people were telling the
15:16:24 2   truth about having taken a market research
15:16:32 3   study in the last 30 days when they were
15:16:34 4   asked that question?
15:16:35 5   A.   So it obviously is a clear
15:16:41 6   question that it asked. I don't -- I do
15:16:44 7   believe that Authentic Response has certain
15:16:47 8   procedures that -- where the data is
15:16:52 9   compared to their own database, where
15:16:57 10 someone may -- if someone misrepresents a
15:17:02 11 particular question like that, and then they
15:17:06 12 have an, the ability to remove them from the
15:17:08 13 panel. And so effectively the people that
15:17:11 14 we are getting in terms of these surveys are
15:17:14 15 those who from Authentic Response's point of
15:17:19 16 view are those who are providing credible
15:17:21 17 answers.
15:17:21 18   Q.   Do you know whether any specific
15:17:24 19 research was done with respect to your
15:17:27 20 sample to determine whether the respondents
15:17:33 21 answered truthfully or not?
15:17:35 22   A.   I do not know that.
15:17:36 23   Q.   With respect to at least the
15:17:44 24 question of whether or not the respondents
15:17:46 25 had taken an Authentic Response survey

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15:17:51 1   within the last 30 days, it would have been
15:17:54 2   possible to check IP addresses, for example;
15:17:58 3   is that right?
15:17:58 4   A.   I believe so.
15:18:00 5   Q.   Now, were there any -- strike
15:18:10 6   that.
15:18:11 7   Did you keep track of whether
15:18:14 8   individuals started the survey but did not
15:18:17 9   finish them for reasons other than that they
15:18:20 10 were screened out automatically by the
15:18:23 11 programming?
15:18:24 12   A.   Let me just go back. So, for
15:18:37 13 example, if I look at my report which is
15:18:39 14 Exhibit 338, on page 8, there were 158
15:18:45 15 respondents that were incomplete and 108,
15:18:49 16 for the H.264 survey, and 189 respondents on
15:18:53 17 the 802.11 survey. So these would fall into
15:19:00 18 those that started the survey but did not
15:19:03 19 get completed or did not get screened.
15:19:05 20   Q.   Did you do any research to
15:19:07 21 determine why nearly a third of respondents
15:19:13 22 stopped taking the survey before they
15:19:15 23 finished?
15:19:16 24   A.   I did not do that. It wasn't
15:19:19 25 necessary to do that in this case.

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15:19:21 1   Q.   Is it unusual in your experience
15:19:25 2   to have a third of starters not complete?
15:19:29 3   A.   No, it's not unusual.
15:19:30 4   Q.   What are the factors that
15:19:41 5   influenced the percentage of incomplete
15:19:48 6   responses in a survey, in an online survey?
15:19:51 7   A.   It could be anything from the
15:19:54 8   fact that -- as to, you know, when we
15:19:57 9   decided to close the survey to get the data
15:20:00 10 and start the analysis. It could be that
15:20:05 11 people had personal factors, they started
15:20:11 12 the survey one evening, or, you know, one
15:20:14 13 afternoon and got busy with other things.
15:20:16 14 So there could be a number of factors and I
15:20:18 15 can't tell for sure.
15:20:26 16   Q.   Does the length of the survey
15:20:28 17 affect the percentage incompletes you
15:20:30 18 anticipate?
15:20:30 19   A.   No, it doesn't, because those
15:20:34 20 starting to take the survey have no reason
15:20:39 21 to know how long -- I mean they know
15:20:42 22 approximately how long a survey is, but I
15:20:45 23 don't believe the length of the survey
15:20:46 24 affects the incompletes.
15:20:48 25   Q.   Does the complexity of the

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15:20:49 1   survey affect the percentage of incomplete
15:20:54 2   questionnaires?
15:20:54 3   A.   No, I don't believe so.
15:20:55 4   Q.   In your experience, it doesn't
15:20:57 5   affect it at all?
15:20:58 6   A.   I've -- if a survey has been
15:21:04 7   designed like the way we've done, the pilot
15:21:06 8   test and the interviews before that, you
15:21:09 9   know, the complexity of the survey doesn't
15:21:11 10 impact the number of incompletes you get.
15:21:14 11   Q.   Have you used a form like we saw
15:21:23 12 in Exhibit 340 in all of your other conjoint
15:21:31 13 surveys?
15:21:32 14   A.   What is that, Exhibit 340?
15:21:42 15   Q.   Sorry, I'm trying to dig it out
15:21:44 16 so I can show it to you.
15:21:46 17   A.   Well, I personally have not used
15:21:50 18 the form. Most of the pilot interviews are
15:21:52 19 done by my field team, and they would have
15:21:57 20 used forms like that while doing pilot
15:22:02 21 surveys.
15:22:03 22   Q.   So if I were to look at the
15:22:05 23 surveys that you did, for example, in the
15:22:09 24 Apple/Samsung matters, I would find
15:22:13 25 documents much like in Exhibit 340?

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15:22:15 1	A. I don't know for sure, but yes,
15:22:17 2	you're likely to find something like that.
15:22:20 3	Q. Same with your other litigation
15:22:21 4	survey that was listed in your CV?
15:22:23 5	A. I would expect so. But again,
15:22:28 6	my field team informs me of what they did in
15:22:30 7	the pilot survey and they give me guidance
15:22:32 8	in terms of designing the survey. I'm not
15:22:35 9	required from the point of view of the pilot
15:22:38 10	surveys. Those are meant to inform me in
15:22:41 11	writing up my survey.
15:22:42 12	Q. In each instance is it your
15:22:45 13	understanding that these forms have been
15:22:47 14	handed out to respondents rather than read
15:22:50 15	to them?
15:22:50 16	A. I don't know for a fact. I
15:22:55 17	can't remember now on every one of those
15:22:58 18	instances exactly how it was done.
15:23:01 19	Q. Has it ever occurred that Ms.
15:23:12 20	Pasternack or somebody else has read this
15:23:14 21	form to a respondent and obtained answers
15:23:16 22	and written down the answers that the
15:23:17 23	respondent gives, rather than giving the
15:23:20 24	document itself to the respondent?
15:23:23 25	MS. HOANG: Objection; form.

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15:23:24 1	A. I don't know for a fact. I was
15:23:26 2	not there.
15:23:26 3	Q. Has Ms. Pasternack ever given
15:23:31 4	these forms out after the respondents took
15:23:35 5	the pilot survey?
15:23:37 6	A. I don't believe so. Again, I
15:23:42 7	don't know for a fact, but I don't believe
15:23:45 8	that would be the case.
15:23:46 9	Q. Do you know why there's no dates
15:23:50 10	on these documents that are assembled in
15:23:53 11	Exhibit 340?
15:23:54 12	A. I don't know.
15:23:56 13	Q. Do you believe that it is
15:23:58 14	standard practice to complete forms like
15:24:01 15	this omitting the date?
15:24:04 16	A. The purpose of this is to inform
15:24:08 17	me. So it is really meant to be one that's
15:24:12 18	a note-taking pad for the respondent in this
15:24:15 19	case.
15:24:16 20	So I would -- there is no
15:24:19 21	standard practice here except what is
15:24:23 22	convenient for the respondent and the
15:24:24 23	moderator who is conducting those pilot
15:24:28 24	surveys.
15:25:04 25	Q. On page 4 of your report there's

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15:25:06 1	a section on survey inputs. Step 1 says "We
15:25:13 2	were provided, by counsel, with descriptions
15:25:15 3	of the features to be tested." Do you see
15:25:18 4	that?
15:25:18 5	A. Yes.
15:25:18 6	Q. Was that provided orally or in
15:25:21 7	writing?
15:25:21 8	A. It was provided orally.
15:25:22 9	Q. Did counsel provide you with the
15:25:32 10	description of the H.264 decoding feature?
15:25:35 11	A. Counsel --
15:25:48 12	MS. HOANG: Yes or no.
15:25:50 13	A. Yes.
15:25:51 14	Q. Did counsel provide you with the
15:25:55 15	description of the Wi-Fi feature?
15:25:58 16	MS. HOANG: Yes or no.
15:25:59 17	A. Verbal description, yes.
15:26:01 18	Q. Did the description of the Wi-Fi
15:26:26 19	feature in the survey differ at all from the
15:26:29 20	description that was provided to you by
15:26:31 21	counsel?
15:26:32 22	A. It was written by me, and it was
15:26:39 23	pilot tested. I don't recall verbatim
15:26:46 24	whether it was the same or it differed. But
15:26:50 25	I can say for a fact that I wrote that to

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15:26:52 1	ensure that it would be understood and then
15:26:55 2	had it pilot tested by Lia Pasternack.
15:27:03 3	Q. Can you look at question QH8 in
15:27:34 4	Exhibit F2, QH8.
15:28:02 5	A. Could you repeat that question
15:28:04 6	again, please. QH?
15:28:06 7	Q. Yes, 8.
15:28:24 8	A. Yes.
15:28:24 9	Q. Did counsel provide you with the
15:28:26 10	definition that's contained in the
15:28:27 11	parenthetical there?
15:28:30 12	A. No, this was written by me.
15:28:33 13	Q. And what did you base this
15:28:41 14	definition on?
15:28:42 15	A. I can't recall exactly, but it
15:28:47 16	was my looking up the definition of H.264
15:28:56 17	encoded video and including a sentence there
15:29:00 18	to describe that.
15:29:01 19	Q. Is there any other information
15:29:52 20	that counsel provided you, either by way of
15:29:54 21	a description or an explanation, that you
15:29:57 22	relied on in either formulating or executing
15:30:03 23	the surveys in this case?
15:30:06 24	MS. HOANG: You can answer yes
15:30:07 25	or no.

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15:30:18	1	A. No.
15:30:18	2	Q. Could you turn to page 6,
15:30:20	3	please. In step 6 you indicate that to
15:30:52	4	qualify for a pre-test the interviewee was
15:30:56	5	required to currently own an Xbox Console.
15:30:59	6	Do you see that?
15:31:04	7	A. Yes.
15:31:04	8	Q. You don't mention here that
15:31:06	9	there was any criteria that screened out
15:31:10	10	people in addition on whether or not they
15:31:12	11	had participated in the decision to purchase
15:31:15	12	the Xbox. Do you want to amend your answer
15:31:18	13	from earlier today?
15:31:30	14	MS. HOANG: Take as much time as
15:31:32	15	you need to review that.
15:31:35	16	MS. THAYER: Counsel, that's a
15:31:36	17	bit of coaching.
15:32:07	18	A. So let me answer this question
15:32:08	19	as follows: Which is my instructions to the
15:32:15	20	field team were to identify those who owned
15:32:21	21	and who made, who were involved in the
15:32:24	22	purchase decision as well.
15:32:28	23	Now, it doesn't matter which way
15:32:31	24	-- and I can't recall -- I don't know for a
15:32:37	25	fact whether both the questions were used in

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15:32:40	1	identifying these people, though the
15:32:45	2	direction of the guidance was to use both
15:32:46	3	questions. It doesn't matter because to a
15:32:53	4	large extent these interviews, these pilot
15:32:56	5	interviews are, the purpose of these
15:32:59	6	interviews are exploratory, they're to
15:33:01	7	ensure that people understand the language,
15:33:04	8	there's no ambiguity and they can complete
15:33:09	9	the task without any problem.
15:33:11	10	So that would be my answer. And
15:33:18	11	my direction to the team was to have those
15:33:23	12	who own as well as those who had an
15:33:25	13	influence into the decision to be included.
15:33:28	14	Q. Is there any document that
15:33:30	15	reflects what you just said rather than
15:33:33	16	what's in the report here?
15:33:34	17	A. I don't have it. At least I
15:33:40	18	have not seen such a document. It was a
15:33:43	19	verbal communication to the moderators who
15:33:47	20	did the pilot survey and I would need to
15:33:52	21	verify that for a fact with the team. In
15:33:57	22	either case, it does not impact.
15:34:00	23	These were largely a pilot test
15:34:02	24	to ensure understandability. This was not
15:34:06	25	the data that was finally collected. The

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15:34:09	1	final data collection involves respondents
15:34:11	2	who answered both the questions.
15:34:13	3	Q. This report says that the
15:34:18	4	pre-test respondents received open-ended
15:34:23	5	verbal debriefs. Is that accurate?
15:34:24	6	A. Yes, it is, because they were
15:34:35	7	told -- let me just -- let me just clarify
15:34:46	8	where you are reading this from.
15:34:48	9	Q. It is the third paragraph under
15:34:49	10	step 6.
15:35:16	11	A. Yes, so basically, they were
15:35:20	12	informed, they were recruited, they were
15:35:23	13	brought into the central location of the
15:35:26	14	mall, they were -- they were briefed to
15:35:30	15	indicate if there were any issues, to make a
15:35:33	16	note of it, and that is what we're calling
15:35:37	17	here as open-ended verbal debriefs from the
15:35:40	18	pre-test respondents.
15:35:43	19	Q. Your report says that these
15:35:44	20	open-ended verbal debriefs took place after
15:35:47	21	the respondents answered the survey
15:35:50	22	questionnaire -- survey questions. So did
15:35:53	23	the debriefing occur both before and after
15:35:57	24	the respondents answered the survey
15:35:59	25	questions?

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15:35:59	1	A. So instructions were given at
15:36:01	2	the start as to what they needed to do, and
15:36:05	3	they were given that form. They took notes
15:36:09	4	on that form, and they handed that, or
15:36:12	5	raised their hands if they had some issues.
15:36:14	6	And that would be the process that would be
15:36:18	7	followed.
15:36:21	8	Q. So if a respondent had this
15:36:23	9	form, read the one question on the front
15:36:24	10	page that says "Can you tell me whether any
15:36:28	11	questions or wording was unclear," if that
15:36:31	12	respondent said no, there was no further
15:36:33	13	debriefing, was there?
15:36:33	14	A. There was no further debriefing
15:36:35	15	because they wrote that, handed that piece
15:36:37	16	of paper, and that was what is done.
15:36:47	17	Q. The report also refers to
15:36:50	18	experienced interviewers in plural. Is it
15:36:53	19	your testimony that there were multiple
15:36:55	20	interviewers who debriefed respondents, or
15:36:58	21	just Ms. Pasternack?
15:37:03	22	A. Ms. Pasternack was the
15:37:06	23	moderator. There were proctors who
15:37:09	24	recruited and got people into the room and
15:37:11	25	seated them, or situated them in front of

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15:37:15	1	the computers so that they were completing
15:37:17	2	the survey.
15:37:18	3	Q. So was there just one
15:37:19	4	interviewer or were there multiple
15:37:21	5	interviewers who debriefed the respondents?
15:37:24	6	A. There was one interviewer, in
15:37:27	7	this case, Lia Pasternack.
15:37:46	8	Q. We talked a little bit about
15:37:59	9	MVAI and I have some additional follow-up
15:38:02	10	questions. Your report on page 11 states
15:38:06	11	that "Willingness to pay, or MVAI, can also
15:38:13	12	be computed using market simulation
15:38:17	13	results."
15:38:18	14	Do you see that sentence?
15:38:19	15	A. Yes.
15:38:22	16	Q. Let me just first start by
15:38:25	17	asking is there any difference in your use
15:38:27	18	of the terms between willingness to pay and
15:38:32	19	MVAI?
15:38:33	20	A. The difference between, you
15:38:43	21	know, what -- again, willingness to pay at
15:38:48	22	the market level for a group of consumers
15:38:51	23	that are represented as survey respondents
15:38:54	24	and the word MVAI are identical.
15:39:01	25	Q. When is willingness to pay not

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15:39:03	1	the same thing as MVAI, as you use those
15:39:06	2	terms?
15:39:06	3	A. Well, I've seen, for example, in
15:39:13	4	Rossi's report where he talks about in a
15:39:14	5	rebuttal to my report, that, you know,
15:39:18	6	again, references it as willingness to pay
15:39:22	7	being computed for each individual
15:39:26	8	respondent in the -- in the survey. And I'm
15:39:30	9	not aware of that approach. I'm aware of
15:39:33	10	the MVAI approach that is described in this
15:39:35	11	paper, and that's the approach that I took.
15:39:37	12	Q. And you'd contrast that
15:39:43	13	approach, you said Dr. Rossi mentioned
15:39:45	14	calculating willingness to pay on an
15:39:47	15	individual basis, you're contrasting that
15:39:50	16	with what?
15:39:50	17	A. I'm contrasting that with what
15:39:54	18	we do out here, which is to take the average
15:40:00	19	utilities across the sample and calculate
15:40:05	20	the MVAI as a ratio, as described in this
15:40:11	21	paper.
15:40:15	22	Q. But if you're getting the
15:40:16	23	average, don't you have to start first by
15:40:18	24	calculating the individual willingness to
15:40:20	25	pay?

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15:40:20	1	A. No, it's not done for each
15:40:24	2	respondent per se, and it is done at the
15:40:29	3	market level and that's the willingness --
15:40:33	4	the right way, the right approach to do it.
15:40:35	5	Q. Is willingness to pay the same
15:40:46	6	thing as market price?
15:40:49	7	A. And what would you mean by the
15:40:53	8	term market price?
15:40:55	9	Q. Is that not a term of art for
15:41:00	10	you?
15:41:02	11	A. Well, economists may look at and
15:41:05	12	say that the actual price charged for a
15:41:08	13	product is the market price. And what price
15:41:12	14	a manufacturer charges for a product may
15:41:18	15	depend on other factors.
15:41:20	16	Q. Factors other than what?
15:41:23	17	A. They could depend on the cost to
15:41:26	18	make it, they could depend on the company's
15:41:29	19	own objectives as to what they want to do
15:41:31	20	with the particular feature.
15:41:34	21	Q. Would it depend --
15:41:36	22	A. That would be the price that
15:41:37	23	would represent more the market price.
15:41:41	24	Whereas, this one is reflective
15:41:42	25	of the survey respondents and what they as a

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15:41:47	1	market represent the maximum price that
15:41:51	2	they're willing to pay.
15:41:53	3	Q. Would the market price at times
15:41:55	4	reflect competition as well?
15:42:00	5	A. The market price could reflect
15:42:02	6	competition, yes.
15:42:03	7	Q. Your report talks about market
15:42:05	8	simulation results. What are you referring
15:42:09	9	to there?
15:42:10	10	A. So there are -- there's a
15:42:14	11	different approach where you might start
15:42:16	12	with -- with simulating, you would start
15:42:22	13	with describing a product that represents a
15:42:27	14	product in the marketplace. You would start
15:42:30	15	a second product that looks exactly the
15:42:32	16	same, same features as the first one. And
15:42:37	17	the calculations in the simulation will give
15:42:38	18	you the average probability of choosing one
15:42:42	19	versus the other.
15:42:42	20	In this case, in this sort of a
15:42:46	21	simulation where the two products are
15:42:48	22	identical, you would expect that the market
15:42:50	23	share would be 50 and 50 for each one of
15:42:52	24	them.
15:42:52	25	You would say that both of these

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15:42:54	1	-- you would start with both of these
15:42:55	2	products not including a feature, for
15:42:58	3	example the Wi-Fi feature may not be
15:43:00	4	included in both of them and the market
15:43:03	5	share for both of these would be 50/50.
15:43:05	6	You would then go to the next
15:43:06	7	step and include the feature the, you know,
15:43:13	8	the B/G networks in one of the products and
15:43:16	9	not include it in the other product, at the
15:43:18	10	same price point, you would you expect that
15:43:19	11	the market share or the probability of
15:43:21	12	choice across the respondents would go up
15:43:24	13	for the product that has the B/G networks
15:43:28	14	included in it, because you're adding value,
15:43:30	15	more people are likely to buy it, you would
15:43:32	16	expect that the market share would go up.
15:43:35	17	At the third step of the
15:43:37	18	simulation, you would then look at -- you
15:43:41	19	would then look at lowering -- sorry,
15:43:42	20	raising the price to lower the market share
15:43:46	21	for this product, the product which has
15:43:49	22	greater features in it, such that the market
15:43:52	23	shares come back to a 50/50 approach.
15:43:57	24	So these steps that I'm talking
15:43:58	25	about is a simulation approach. The

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15:44:00	1	difference in the price that you had to
15:44:02	2	raise it by represents the willingness to
15:44:05	3	pay, and that's a different approach, it
15:44:12	4	uses an approach of doing these simulations
15:44:14	5	step by step and will yield exactly the same
15:44:17	6	results as the calculation approach that we
15:44:19	7	have taken out here.
15:44:20	8	Q. You did not undertake any market
15:44:26	9	simulation though, I take it?
15:44:27	10	A. I did not undertake market
15:44:29	11	simulations.
15:44:30	12	Q. Can you define the marginal
15:44:34	13	utility of income?
15:44:46	14	MS. HOANG: Objection; form.
15:44:47	15	A. The marginal utility of income,
15:44:50	16	again, this is from my days of studying
15:44:53	17	economics, I'm not an economist, would be
15:44:57	18	the additional value for a dollar of income
15:45:00	19	that a consumer places. It's purely an
15:45:04	20	economic related term.
15:45:06	21	Q. Does the concept of marginal
15:45:10	22	utility of income have anything to do with
15:45:12	23	calculating a consumer's willingness to pay
15:45:15	24	for a product feature?
15:45:17	25	A. Not explicitly, but when you

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15:45:21	1	look at the way a consumer makes choices, if
15:45:27	2	income is more important to them, you are
15:45:30	3	less likely to see them buy a product that
15:45:33	4	has the higher price and that it
15:45:35	5	automatically takes into account that the
15:45:37	6	demand is reflective of the margin -- the
15:45:42	7	income and the budget constraints that any
15:45:44	8	consumer might have in making purchase
15:45:47	9	decisions.
15:46:03	10	Q. So is it correct that the
15:46:05	11	valuation of a product involves the market
15:46:11	12	price?
15:46:13	13	MS. HOANG: Objection; form.
15:46:15	14	A. I'd want to know what you mean
15:46:19	15	by market -- the valuation.
15:46:27	16	Q. The value that a consumer places
15:46:32	17	on a product feature, for example, does that
15:46:35	18	reflect the market price or not?
15:46:40	19	MS. HOANG: Same objection.
15:46:41	20	A. That represents what a consumer
15:46:43	21	is, or consumers are collectively willing to
15:46:48	22	pay for the benefit from a particular
15:46:50	23	feature. The actual price that a
15:46:52	24	manufacturer might charge for something may
15:46:54	25	be dependent on other factors.

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15:46:56	1	Q. In your table 11, if the Sony
15:47:21	2	PlayStation has built in Wi-Fi compatible
15:47:24	3	with B/G/N networks, would that tend to
15:47:32	4	increase or decrease the weighted MVAI in
15:47:38	5	this survey, or be neutral?
15:47:41	6	MS. HOANG: Objection.
15:47:50	7	A. I cannot say for sure, because
15:47:51	8	it also depends on Sony. But I can tell you
15:47:54	9	that my expectation would be that consumers
15:47:56	10	would place a higher MVAI, Xbox consumers
15:48:03	11	would place a higher MVAI because they would
15:48:06	12	now have the ability to switch to a Sony if
15:48:14	13	the particular feature is important to them.
15:48:28	14	Q. Earlier I asked some questions
15:48:30	15	about the confidence levels that are
15:48:32	16	presented in tables 11 and 15. Why did you
15:48:34	17	not show margins of error or confidence
15:48:39	18	levels in the other tables of data that are
15:48:43	19	contained in your report?
15:48:47	20	A. The approach to compute the
15:48:49	21	margins of errors for all of the other
15:48:52	22	tables are very well contained in the data
15:48:55	23	that is presented, and I have given a broad
15:49:00	24	range that says the maximum you would get is
15:49:02	25	about 5.2 percent given the sample sizes

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15:49:05	1
15:49:12	2
15:49:14	3
15:49:16	4
15:49:18	5

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15:49:05 1 that we chose. So there was really no need
15:49:12 2 to give it on every one. Those are standard
15:49:14 3 approaches, those are standard methodologies
15:49:16 4 to compute confidence intervals and there
15:49:18 5 was no need to do that.
15:49:20 6   In this particular aspect there
15:49:22 7 was a need to do that.
15:49:24 8   Q.   I believe you referred me to one
15:49:26 9 place in the book that we had out with
15:49:29 10 respect to the statement on page 7 that gave
15:49:32 11 the range of 3.5 to 5.2 percent. What other
15:49:37 12 standard methodologies are you referring to
15:49:38 13 in the answer you just gave?
15:49:41 14   A.   So in that, there were two
15:49:45 15 places there that we have marked in that
15:49:50 16 book.
15:49:55 17   Q.   I believe when I asked you about
15:49:56 18 page 7 you directed me to the large, large
15:50:04 19 sample confidence intervals on pages 394 and
15:50:09 20 395; is that correct?
15:50:10 21   A.   Let me just --
15:50:19 22   Q.   It's Exhibit 350, I believe.
15:50:32 23   A.   So the basic formula is right
15:50:34 24 here at the bottom of page 395, which put
15:50:40 25 in, so equation 18 as an example, as the

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15:50:44 1 formula. The confidence interval, and I
15:50:47 2 could tell you the formula is you would take
15:50:50 3 the square root of the percentage of people
15:50:54 4 who answered the question in a particular
15:50:55 5 way times one minus the percentage of people
15:50:58 6 who answered in that fashion, divided by the
15:51:00 7 sample size, and you would multiply by the Z
15:51:04 8 statistic. That gives you plus or minus,
15:51:07 9 that gives you the confidence interval.
15:51:09 10   It's a very standard formula for
15:51:11 11 large samples that you're talking about out
15:51:13 12 here.
15:51:13 13   Q.   Is it your testimony that this
15:51:15 14 equation is applicable to all of the
15:51:18 15 parameters that you report in all of the
15:51:20 16 tables other than tables 11 and 15?
15:51:23 17   A.   That's correct.
15:51:24 18   Q.   What is a posterior
15:51:31 19 distribution?
15:51:32 20   A.   A posterior distribution is a
15:51:40 21 term that is used by Bayesian statisticians
15:51:45 22 to indicate that they started with assuming
15:51:49 23 a particular statistic, approach -- use --
15:51:54 24 as a prior distribution information or data
15:51:57 25 becomes available, that data helps them with

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15:52:00 1 updating what the prior distribution was and
15:52:04 2 that updated distribution is referred to as
15:52:07 3 a posterior distribution.
15:52:08 4   Q.   Is the output of the CBC/HB
15:52:11 5 software a posterior distribution?
15:52:14 6   A.   The output of the utilities
15:52:21 7 represents the mean of the posterior
15:52:23 8 distributions.
15:52:24 9   Q.   Does that mean it is or is not a
15:52:29 10 posterior distribution?
15:52:30 11   A.   It is not a posterior
15:52:31 12 distribution, but it is a summary of the
15:52:33 13 posterior distribution.
15:52:43 14   MS. THAYER: I'd like to take
15:52:44 15 one more break now. I'm beginning to
15:52:48 16 see the end and I'd like to see how
15:52:51 17 much time we have left on our current
15:52:53 18 tape.
15:52:54 19   THE VIDEOGRAPHER: 13 minutes.
15:52:55 20   MS. THAYER: Why don't we go
15:52:56 21 ahead and change tape, we'll run to
15:52:58 22 the end.
15:53:01 23   THE VIDEOGRAPHER: One moment,
15:53:01 24 please, watch your microphones. Here
15:53:04 25 now marks the end of tape 5 of the

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15:53:06 1 deposition of Dr. R. Sukumar. The
15:53:08 2 time is 3:53 p.m., we're off the
15:53:11 3 record.
15:53:11 4   (A recess was taken.)
16:06:35 5   THE VIDEOGRAPHER: Here now
16:06:43 6 marks the beginning of tape 6 of the
16:06:45 7 deposition of Dr. R. Sukumar, the time
16:06:47 8 is 4:06 p.m., we're back on the
16:06:50 9 record.
16:06:54 10   Q.   Before our last break I had
16:06:56 11 asked you a question about posterior
16:06:57 12 distribution. Let me also ask you if, and I
16:07:01 13 apologize if I already have, are you
16:07:03 14 familiar with the term posterior credibility
16:07:06 15 region?
16:07:06 16   A.   I'm not a Bayesian by training,
16:07:11 17 so I'm not very familiar, but I know what
16:07:14 18 credibility region is and I know when you
16:07:17 19 say posterior credibility region what it
16:07:20 20 probably pertains to, but I'm not an expert
16:07:21 21 at that.
16:07:22 22   Q.   Understanding that it's not
16:07:25 23 within your expertise, just what
16:07:28 24 understanding do you have of the
16:07:29 25 relationship between a posterior

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16:07:31	1	distribution and a posterior credibility
16:07:34	2	region?
16:07:34	3	A. The posterior credibility
16:07:39	4	region, credibility regions are computed
16:07:42	5	around parameters that represent the
16:07:44	6	posterior distribution, posterior
16:07:46	7	distribution.
16:07:48	8	Credibility regions are similar
16:07:50	9	to confidence intervals for, you know, those
16:07:54	10	of us who focus more on parametric kind of
16:07:58	11	approaches.
16:07:58	12	Q. Let me ask you to take a look at
16:08:01	13	Exhibit 350. I think it's in front of you
16:08:04	14	right now. You had earlier pointed me to
16:08:13	15	page 181 in connection with the calculations
16:08:16	16	underlying your exhibit, excuse me, your
16:08:20	17	tables 11 and 15, do you recall that?
16:08:37	18	A. Table 11, right?
16:08:39	19	Q. Is that correct?
16:08:40	20	A. Yes.
16:08:42	21	Q. Looking at line 15, am I correct
16:08:44	22	that this refers to sampling distributions
16:08:48	23	and not posterior distributions?
16:08:52	24	A. Yes. So this represents an
16:08:57	25	approximation when you have the ratio of two

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16:08:59	1	random variables, that -- so this is more a
16:09:05	2	measure -- a confidence interval estimate,
16:09:09	3	it helps computes the confidence interval
16:09:12	4	estimate for the willingness to pay which
16:09:14	5	comes from that part worth utilities.
16:09:20	6	Q. But this formula here is used in
16:09:25	7	connection with sampling distributions not
16:09:27	8	posterior distributions; is that not right?
16:09:30	9	A. This is used in the connection
16:09:32	10	with -- with sampling distributions or
16:09:37	11	ratios of random variables.
16:09:42	12	Q. And is not typically used with
16:09:45	13	posterior distributions, is it?
16:09:46	14	A. Well, the posterior
16:09:51	15	distributions are used when you're looking
16:09:56	16	at the distribution around, that is obtained
16:09:59	17	from the Bayesian formula.
16:10:01	18	So posterior distribution -- the
16:10:05	19	credible interval around, for example, the
16:10:09	20	part worth utilities itself, would be
16:10:12	21	appropriate to use the posterior
16:10:14	22	distributions and the credible intervals for
16:10:17	23	that.
16:10:17	24	This is a formula that is used
16:10:21	25	for the part worth utilities and assuming

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16:10:25	1	that part worth utilities are represented,
16:10:28	2	are a sample, are coming from a sample of
16:10:35	3	the 499 or 561 individuals and the fact that
16:10:37	4	we have these as random variables and we're
16:10:39	5	taking ratios of these random variables, the
16:10:42	6	ratio of the random variable is not clear as
16:10:45	7	to what that random variable would be, or
16:10:47	8	what the distribution of what that random
16:10:49	9	variable would be.
16:10:50	10	So what you're seeing here is an
16:10:52	11	approximation formula to help compute the
16:10:54	12	confidence intervals around the ratios that
16:10:59	13	are -- that represent the MVAI calculation.
16:11:04	14	Q. You mentioned that this equation
16:11:07	15	is an approximation. Am I correct that the
16:11:09	16	two parallel squiggly lines that we see in
16:11:15	17	line 15 is a way of representing that the
16:11:21	18	right side of the equation is an
16:11:24	19	approximation?
16:11:24	20	A. Right, because -- that's
16:11:26	21	correct.
16:11:26	22	Q. This approximation, is this
16:11:29	23	referred to as the Delta method of
16:11:31	24	calculating an approximate variance?
16:11:34	25	A. That's correct.

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16:11:34	1	Q. And this is something that has
16:11:40	2	been developed in the classical statistical
16:11:43	3	approach?
16:11:43	4	A. That is correct.
16:11:45	5	Q. If you were to calculate a
16:12:12	6	Bayesian credibility region with respect to
16:12:20	7	the MVAIs that you have reported in table
16:12:24	8	11, would you agree that the, that that
16:12:29	9	region would look different from the
16:12:31	10	intervals that you have reported in table
16:12:33	11	11?
16:12:33	12	A. I would not know how it would --
16:12:38	13	how different it would look. It could
16:12:39	14	possibly be different, yes.
16:12:41	15	Q. Are you aware of anybody else in
16:12:45	16	your profession that applies the Delta
16:12:51	17	method of approximation that we see here in
16:12:54	18	Exhibit 350 to part worth ratios to state
16:13:04	19	confidence intervals for MVAI calculations?
16:13:10	20	A. Yes, I am.
16:13:11	21	Q. And who are you aware of in that
16:13:14	22	regard?
16:13:15	23	A. Professor Srinivasan is one of
16:13:18	24	them.
16:13:18	25	Q. Anybody else?

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16:13:24	1	A. No, that's one that comes to the
16:13:26	2	top of my mind.
16:13:27	3	Q. Well, if between now and the end
16:13:29	4	of the deposition there's anybody else that
16:13:31	5	comes to mind, I'd appreciate if you'd let
16:13:33	6	me know and I'll ask one more last time
16:13:36	7	before we conclude.
16:13:37	8	A. Sure.
16:13:37	9	Q. Thank you. Are you familiar
16:13:43	10	with Dr. Peter Rossi?
16:13:45	11	A. Yes, I'm familiar with him.
16:13:46	12	Q. Are you professionally familiar
16:13:48	13	with him?
16:13:48	14	A. I'm familiar with his work.
16:13:50	15	Q. Is he a recognized expert in any
16:13:54	16	particular field so far as you know?
16:13:55	17	A. A lot of his work is in the use
16:14:01	18	of Bayesian statistics.
16:14:06	19	Q. Do you know is he recognized as
16:14:08	20	having any expertise in the area of conjoint
16:14:10	21	analysis?
16:14:11	22	A. As it pertains to the
16:14:14	23	application of Bayesian statistics in using
16:14:18	24	conjoint, in using choice based conjoint
16:14:22	25	data and computing part worth utilities,

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16:14:25	1	that's where his work is.
16:14:26	2	Q. Do you believe that he is
16:14:32	3	qualified to provide opinions in this case
16:14:36	4	about the research that was undertaken by
16:14:42	5	your company?
16:14:52	6	MS. HOANG: Objection; form.
16:14:54	7	A. Well, when I look at his reports
16:14:56	8	and I look at the kinds of comments he
16:14:59	9	makes, my personal feeling is that he has
16:15:04	10	not been involved in doing survey research,
16:15:09	11	but he's an expert in Bayesian statistics
16:15:13	12	and he can, he can comment on the CBC/HB
16:15:15	13	approach that I've taken.
16:15:17	14	Q. What about his rebuttal report
16:15:19	15	suggests to you that he has not been
16:15:20	16	involved in doing survey research?
16:15:24	17	A. If I can get a copy of his
16:15:25	18	report I can point to a few things.
16:15:30	19	Q. Of course.
16:15:30	20	MS. THAYER: And counsel, I
16:15:31	21	don't think there's any question as to
16:15:33	22	what this is, so if you don't mind I
16:15:35	23	will not mark it and attach it.
16:15:38	24	MS. HOANG: That's fine.
16:15:38	25	Q. But I will hand you the expert

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16:15:41	1	report of Peter E. Rossi, August 10, 2012.
16:16:18	2	A. So, for example, in paragraphs
16:16:31	3	22, "A draft of the questionnaire should be
16:16:34	4	pre-tested to determine if respondents
16:16:36	5	understand the survey questions. Typically,
16:16:38	6	the results of the pre-test inform revisions
16:16:40	7	of the survey questionnaire. Once a
16:16:42	8	finalized questionnaire is developed, a
16:16:44	9	sampling procedure is established to select
16:16:47	10	and administer the survey to sample
16:16:49	11	respondents. Dr. Sukumar reports that
16:16:51	12	certain individuals conducted a pre-test,"
16:16:54	13	and then he goes on to paragraph 23 where he
16:16:56	14	says "Dr. Sukumar used Authentic Response to
16:16:59	15	implement the sampling procedure," does not
16:17:04	16	identify -- "Dr. Sukumar does not identify
16:17:06	17	or comment on the procedures implemented by
16:17:08	18	Authentic Response to select their panel but
16:17:11	19	does state that he directed that members of
16:17:13	20	the Authentic Response panel be selected at
16:17:16	21	random for invitation. Survey respondents
16:17:19	22	were compensated by a free gift."
16:17:22	23	So when you look at when he
16:17:23	24	comments specifically about some of these
16:17:24	25	things later on, survey research is one

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16:17:27	1	where people are randomly selected from a
16:17:31	2	sampling frame. In our case, the random
16:17:34	3	selection was the invitations that were sent
16:17:36	4	out, which is a very common practice.
16:17:40	5	Authentic Response web and online surveys
16:17:46	6	are now very prominent and used extensively.
16:17:49	7	Authentic Response is a company that
16:17:51	8	provides these samples and manages these
16:17:54	9	panels.
16:17:55	10	And then in subsequent
16:18:01	11	statements he goes into the comment -- right
16:18:05	12	here he talks about free gift. It is common
16:18:09	13	practice that members who are in a -- who
16:18:13	14	belong to a panel who are used in surveys
16:18:16	15	are compensated in some fashion for the time
16:18:20	16	that they spent in completing a survey, and
16:18:25	17	a physician may be compensated a lot more
16:18:26	18	than a consumer is because of the time value
16:18:28	19	of money that you place for each of these
16:18:30	20	respondents.
16:18:31	21	So these are examples where he's
16:18:33	22	critiquing these things. These are standard
16:18:35	23	procedures that are used in survey research.
16:18:39	24	It's very common to use these panels, it's
16:18:42	25	very common to use, to have the pilot test

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16:18:47   1   give guidance in that the incentive, he
16:18:52   2   calls it free gift is a term, but incentive
16:18:56   3   given to survey respondents is, again, a
16:18:59   4   common practice.
16:19:00   5   Q.   Well, in paragraphs 22 and 23,
16:19:02   6   can you tell me more specifically what it is
16:19:05   7   that he has written in either one of those
16:19:07   8   paragraphs that suggests that he has not
16:19:10   9   been involved in doing survey research
16:19:13   10 himself?
16:19:13   11   A.   Well, when he critiques that, it
16:19:32   12 is, he critiques that as being an area of
16:19:37   13 concern, and that to me is indicative of
16:19:41   14 someone who as -- you know, I would be
16:19:49   15 concerned about, do they really know how
16:19:50   16 survey research is done in practice.
16:19:53   17   Q.   Well I'm focusing very
16:19:54   18 specifically on paragraphs 22 and 23 because
16:19:57   19 those are the ones you read into the record.
16:19:59   20 What about those paragraphs indicates to you
16:20:01   21 that he is critiquing something that is
16:20:04   22 commonly done?
16:20:06   23   A.   So the term that he uses, now
16:20:10   24 let me -- these are standard practices and
16:21:00   25 he says later on page 19 of his report that

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16:21:05   1   a survey, Dr. Sukumar did not follow
16:21:09   2   standard industry practice and I would
16:21:14   3   assume that -- or in 64 he says "Dr.
16:21:20   4   Sukumar's survey data is only valid if a
16:21:22   5   sample could be projected to the relevant
16:21:25   6   population."
16:21:26   7   When you're using a random
16:21:28   8   sample from a sampling frame, a common
16:21:31   9   practice done with panel providers like
16:21:35   10 Authentic Response, and then to say that the
16:21:38   11 survey data is not, is only valid if a
16:21:41   12 sample can be projected to the relevant
16:21:44   13 population, you know, suggests that, you
16:21:48   14 know, he has not possibly done, it suggests,
16:21:52   15 I mean as I said, his critique in some of
16:21:55   16 these, and I'm not being specific on every
16:21:57   17 item, but it does begin to suggest that his
16:22:04   18 focus is not in the area of survey research
16:22:07   19 or having done a lot of survey research out
16:22:11   20 there.
16:22:11   21   Q.   Do you disagree with the
16:22:13   22 proposition that survey data is only valid
16:22:17   23 if the sample can be projected to the
16:22:19   24 relevant population?
16:22:20   25   A.   Well, the data that we have here

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16:22:25   1   is projectable to the relevant population.
16:22:29   2   Q.   That's not the question.
16:22:31   3   A.   It was a random sample.
16:22:32   4   Q.   Excuse me, I'm sorry, I
16:22:34   5   interrupted you.
16:22:36   6   A.   Sorry, go ahead.
16:22:40   7   MS. THAYER: Could I have you
16:22:41   8   read back my question because I very
16:22:43   9   specifically phrased the question in
16:22:45   10 one way and I think you were answering
16:22:47   11 a different one.
16:22:47   12   (Record read as requested.)
16:23:04   13   A.   The answer there is survey data,
16:23:06   14 you know, is projectable to the population
16:23:14   15 if it is randomly selected and in this case
16:23:16   16 it was randomly selected, so yes.
16:23:18   17   Q.   Yes, you agree with the
16:23:21   18 statement that was in my question?
16:23:22   19   A.   That survey data can be used to
16:23:31   20 project to a population.
16:23:32   21   Q.   No, my question is whether it is
16:23:34   22 accurate to state that survey data is only
16:23:37   23 valid if the survey sample can be projected
16:23:40   24 to the relevant population, do you agree
16:23:43   25 with that statement?

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16:23:44   1   A.   And the reason I'm hesitant to
16:23:49   2   completely answer that question is because
16:23:51   3   there are instances where the survey data is
16:23:56   4   only, it is only possible to get survey data
16:23:59   5   that is convenience based and that's the
16:24:05   6   practicality of the -- of the instance.
16:24:07   7   In this case, the survey data is
16:24:09   8   a true random sample and the proposition
16:24:12   9   that you indicate, yes, it can be projected
16:24:15   10 to the population.
16:24:18   11   Q.   So you disagree that the sample
16:24:23   12 that you used was convenience based?
16:24:25   13   A.   I disagree that it was
16:24:28   14 convenience based.
16:24:29   15   Q.   Were you aware of Dr. Rossi's
16:24:45   16 involvement in developing the software
16:24:49   17 program that -- excuse me, in developing the
16:24:54   18 algorithm used in the Sawtooth Software
16:24:57   19 program for calculating part worths?
16:25:00   20   A.   He mentioned it, he mentions
16:25:02   21 that in his rebuttal report and based on
16:25:05   22 that, yes, I am aware that he was involved
16:25:08   23 in that.
16:25:09   24   Q.   Other than what you've pointed
16:25:14   25 out to me so far, is there anything else

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16:25:17	1	either about Dr. Rossi or his rebuttal
16:25:20	2	report that causes you to question whether
16:25:22	3	or not he's qualified to give expert
16:25:24	4	testimony in this case regarding the survey
16:25:27	5	research that you undertook?
16:25:37	6	A. On page 11, paragraph 39, and
16:25:50	7	I'm going now to page 12, he says "Given
16:25:55	8	that MBAFFs is a highly technical term that
16:25:58	9	is very uncommonly used, it seems highly
16:26:01	10	likely that most respondents do not know
16:26:03	11	what this term means. I recall Dr. Sukumar
16:26:06	12	does not define it other than to state the
16:26:08	13	words that make up the acronym. I would
16:26:10	14	then expect more than 95 percent to respond
16:26:13	15	not sure."
16:26:15	16	It is not clear what the basis
16:26:17	17	of his statement is out here. I mean in the
16:26:22	18	results we had, only 16 percent said they
16:26:26	19	had heard about MBAFF, and, you know, it was
16:26:31	20	not 95 percent. And just as one could argue
16:26:33	21	-- you know, it was not 95 percent who said
16:26:36	22	they'd heard of MBAFF.
16:26:38	23	So the basis for some of this
16:26:40	24	critique here, for example, is not very
16:26:42	25	clear to me.

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16:26:42	1	Q. Do you agree that MBAFF is a
16:26:45	2	highly technical term?
16:26:46	3	A. Yes, it is.
16:26:47	4	Q. Do you agree that H.264 protocol
16:26:53	5	is a technical term?
16:26:55	6	A. Yes, it is, but respondents in
16:26:58	7	this, who are Xbox owners or players among
16:27:03	8	them can be individuals who are highly
16:27:08	9	technical and understand this. And we
16:27:10	10	didn't get a hundred percent of the people
16:27:12	11	saying they understand these terms, we only
16:27:16	12	got 16 percent of those who said they
16:27:18	13	understand this term.
16:27:19	14	Q. Where is the 16 percent that
16:27:24	15	you're referring to in these answers in your
16:27:26	16	report?
16:27:26	17	A. So I would want to go to the
16:27:36	18	errata. It says Exhibit 345, table 9, so
16:27:56	19	the errata related to table 9, only 16
16:27:58	20	percent of the 499 Xbox owners said they --
16:28:10	21	the specific question they were asked about
16:28:11	22	using MBAFF.
16:28:19	23	Q. Of the 16 percent that reported
16:28:34	24	having used it, do you know what percentage
16:28:37	25	understood what that term was?

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16:28:38	1	A. Let me make sure I'm reading.
16:28:44	2	So it says "Please select the type of video
16:28:46	3	content you have viewed on your Xbox
16:28:50	4	Console," and 16 percent of the total sample
16:28:52	5	of 499 checked MBAFF as an answer.
16:29:00	6	Now, if they did -- the question
16:29:03	7	the way it is phrased, if they did not have
16:29:05	8	an answer to that they would have said not
16:29:07	9	sure, and you can see the answers to those
16:29:09	10	who said not sure is much larger.
16:29:12	11	Q. So you would have expected zero
16:29:14	12	percent of respondents in your survey to
16:29:16	13	have guessed at the answer to that question?
16:29:18	14	A. I'm not sure I understand your
16:29:20	15	question. Could you repeat that.
16:29:22	16	Q. You're assuming that no one in
16:29:25	17	your survey who checked the box MBAFFs was
16:29:31	18	guessing; is that right?
16:29:33	19	A. It's -- I would assume that
16:29:36	20	they're not guessing because it's very clear
16:29:40	21	if they were, they didn't know about it,
16:29:42	22	they were not sure about it, they had an opt
16:29:44	23	out and they would have checked 98. And if
16:29:47	24	-- I mean they would have checked not sure.
16:29:50	25	And if Professor Rossi's 95 percent were

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16:29:53	1	true, then that number would have been 95
16:29:56	2	percent.
16:29:58	3	Q. You mean it would have been 5
16:30:00	4	percent?
16:30:00	5	A. No, he says in his, in his
16:30:06	6	rebuttal, and I'll look get it for a second
16:30:10	7	here, on page 12 he says "I would expect 95
16:30:26	8	percent to respond not sure." So he's
16:30:28	9	saying that he would expect only 5 percent
16:30:30	10	who would really know the answer.
16:30:31	11	So the survey clearly is
16:30:35	12	capturing, you know, 16 percent. He says it
16:30:39	13	likely would have only been 5 percent who
16:30:42	14	said what MBAFF was. What is the basis that
16:30:45	15	he has?
16:30:47	16	In my case the basis is that
16:30:50	17	it's a clear question, the question has been
16:30:52	18	asked in very simple terms. The responses
16:30:54	19	may be difficult, the responses may not be
16:30:57	20	commonplace knowledge, they're not words
16:30:59	21	that people know. I mean even, for example,
16:31:01	22	a word like Dolby, most people don't know
16:31:04	23	what Dolby really stands for, but they've
16:31:07	24	seen, they've been exposed to those terms.
16:31:09	25	So clearly, you know, his 5

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16:31:11	1	percent versus my 16 percent, you know, mine
16:31:14	2	is based on the 499 respondents that took
16:31:16	3	the survey, his 5 percent is not clear as to
16:31:20	4	where he came up with.
16:31:21	5	Q. Would you agree that visually
16:31:23	6	it's almost impossible to distinguish
16:31:26	7	interlaced and progressive scan video output
16:31:29	8	when displayed even on a high quality
16:31:31	9	display?
16:31:32	10	A. I'm not a technical person. I
16:31:33	11	cannot make those differences, but there are
16:31:39	12	people among these technology players who
16:31:44	13	may understand that, who may be able to
16:31:46	14	visually distinguish that.
16:31:48	15	Q. At the time that you included
16:31:49	16	the questions QH5A1 and 2, did you know
16:31:59	17	whether it was possible to distinguish
16:32:01	18	interlaced and progressive scan video
16:32:04	19	output?
16:32:06	20	A. So personally, again, you know,
16:32:10	21	from a technology point of view,
16:32:14	22	distinguishing that was not the intent here.
16:32:15	23	The intent was do people -- they all had an
16:32:19	24	opt out, they could have said I don't know
16:32:20	25	the distinction between these two things, I

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16:32:23	1	don't -- the answer is not sure. They would
16:32:25	2	have answered the question -- given the
16:32:26	3	response to that question as not sure. And
16:32:29	4	we got a big chunk of people, we got 50
16:32:32	5	percent of the people or more saying not
16:32:34	6	sure, I don't know the difference between
16:32:35	7	interlaced and progressive.
16:32:40	8	MS. THAYER: Could you read back
16:32:41	9	my question, please.
16:32:42	10	(Record read as requested.)
16:32:57	11	A. I did not know whether you can
16:33:02	12	distinguish that, and for the purposes of
16:33:05	13	the survey I did not need to know that.
16:33:07	14	Q. Is there any particular reason
16:33:09	15	that the documentation that we saw reflected
16:33:14	16	in the letters that we've marked here,
16:33:20	17	letters to me that we've marked that
16:33:21	18	contained information and citations to
16:33:25	19	files, is there any particular reason those
16:33:27	20	documents and files were not produced at the
16:33:29	21	time that you submitted your report?
16:33:33	22	A. There's no particular reason. I
16:33:37	23	mean the files, you know, the main core data
16:33:46	24	files were given at the beginning and then
16:33:48	25	it looked like there were things that were

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16:33:50	1	missing and they were subsequently handed
16:33:53	2	over.
16:33:53	3	Q. On how many previous occasions
16:33:59	4	have you employed Authentic Response to
16:34:02	5	provide, to select and provide respondents
16:34:08	6	for a conjoint questionnaire?
16:34:10	7	A. So I don't know an exact number,
16:34:13	8	but I want to say that in the last seven or
16:34:17	9	eight months they have probably worked on
16:34:21	10	somewhere in the range of six to ten
16:34:24	11	different studies. Again, I don't know the
16:34:26	12	exact number. My operations team basically
16:34:28	13	keeps track of that.
16:34:29	14	Q. Prior to seven to eight months
16:34:31	15	ago, had you worked with or hired Authentic
16:34:36	16	Response to work with you?
16:34:37	17	A. I believe so, that they were
16:34:39	18	used last year as well.
16:34:41	19	Q. How many times?
16:34:42	20	A. I don't remember an exact
16:34:48	21	number.
16:34:49	22	MS. THAYER: Let's take a very
16:34:50	23	brief break, I may be done.
16:34:52	24	THE VIDEOGRAPHER: One moment,
16:34:53	25	please, watch your microphones. The

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16:34:54	1	time is 4:34 p.m., we're now off the
16:34:57	2	record. One moment.
16:36:15	3	(A recess was taken.)
16:36:15	4	THE VIDEOGRAPHER: The time is
16:36:19	5	4:36 p.m., back on the record.
16:36:22	6	Q. Have you been able to think of
16:36:25	7	anyone other than Dr. Srinivasan in response
16:36:31	8	to the question I asked you earlier about
16:36:32	9	anyone you knew who had employed theorem 4
16:36:36	10	to calculate confidence intervals?
16:36:39	11	A. You know, it hasn't come back to
16:36:41	12	me, but if it does come after this and I'm
16:36:45	13	sure there are others who have used it, so
16:36:49	14	I'll be sure to mention it to counsel.
16:36:55	15	Q. I'm going to hand you Exhibit
16:36:57	16	339. There is a line item with a star up
16:37:07	17	near the top right. Can you read that?
16:37:11	18	A. On the top right. No.
16:37:14	19	Q. There's a star, it looks like
16:37:16	20	"models - resp, difficult."
16:37:21	21	A. So these are notes that are Lia
16:37:24	22	Pasternack's, I can't read her handwriting.
16:37:26	23	I did not see these or rely on these in any
16:37:29	24	of my reports.
16:37:30	25	Q. Did Ms. Pasternack report to you

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16:37:32	1	that the respondents had difficulty
16:37:34	2	distinguishing among the models of either
16:37:39	3	Xbox or other types of players that she was
16:37:43	4	discussing with them?
16:37:47	5	A. I don't recall that, but I do
16:37:54	6	recall that the notion of needing to see the
16:37:59	7	thumbnail, photo thumbnails was something
16:38:02	8	that she mentioned and we had included
16:38:04	9	pictures related to the thumbnail sketches
16:38:08	10	of the boxes.
16:38:09	11	Q. Do you recall anything else that
16:38:12	12	she mentioned to you after her first sets of
16:38:18	13	interviews in connection with this study?
16:38:20	14	A. Well, the conversation, I mean
16:38:26	15	the debrief that she gave me was the one
16:38:28	16	that was used to develop the survey. So the
16:38:33	17	product of that, of these interviews and her
16:38:36	18	debrief is what led to the development of
16:38:39	19	that, of the survey that was pilot tested.
16:38:42	20	The specifics I can't remember
16:38:45	21	now, but that was what led me to confirm
16:38:48	22	what we did there in the survey.
16:38:52	23	MS. THAYER: With that, I have
16:38:54	24	nothing further.
16:38:56	25	MS. HOANG: I have nothing

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16:38:57	1	further.
16:38:58	2	THE VIDEOGRAPHER: One moment,
16:38:59	3	please, watch your microphones. Here
16:39:00	4	now marks the end of tape 6 of the
16:39:02	5	deposition of Dr. R. Sukumar. The
16:39:05	6	time is 4:39 p.m., we're now off the
16:39:07	7	record.
16:39:07	8	(A recess was taken.)
	9	
	10	
	11	_____
	12	RAMAMIRTHAM SUKUMAR
	13	
	14	Subscribed and sworn to before me
	15	this _____ day of _____, 2012.
	16	
	17	_____
	18	
	19	
	20	
	21	
	22	
	23	
	24	
	25	

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1	C E R T I F I C A T E
2	STATE OF NEW YORK)
3	: ss.
4	COUNTY OF NEW YORK)
5	
6	I, GAIL F. SCHORR, a Certified
7	Shorthand Reporter, Certified Realtime
8	Reporter and Notary Public within and for
9	the State of New York, do hereby certify:
10	That RAMAMIRTHAM SUKUMAR, the
11	witness whose deposition is hereinbefore set
12	forth, was duly sworn by me and that such
13	deposition is a true record of the testimony
14	given by the witness.
15	I further certify that I am not
16	related to any of the parties to this action
17	by blood or marriage, and that I am in no
18	way interested in the outcome of this
19	matter.
20	IN WITNESS WHEREOF, I have
21	hereunto set my hand this ____ day of
22	_____, 2012.
23	
24	_____
25	GAIL F. SCHORR, C.S.R., C.R.R.